

=> file registry

FILE 'REGISTRY' ENTERED AT 12:01:44 ON 05 SEP 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 4 SEP 2007 HIGHEST RN 946048-22-2  
DICTIONARY FILE UPDATES: 4 SEP 2007 HIGHEST RN 946048-22-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when  
conducting SmartSELECT searches..

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> file zcaplus

FILE 'ZCAPLUS' ENTERED AT 12:01:49 ON 05 SEP 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is  
held by the publishers listed in the PUBLISHER (PB) field (available  
for records published or updated in Chemical Abstracts after December  
26, 1996), unless otherwise indicated in the original publications.  
The CA Lexicon is the copyrighted intellectual property of the  
American Chemical Society and is provided to assist you in searching  
databases on STN. Any dissemination, distribution, copying, or storing  
of this information, without the prior written consent of CAS is  
strictly prohibited.

FILE COVERS 1907 - 5 Sep 2007 VOL 147 ISS 11  
FILE LAST UPDATED: 4 Sep 2007 (20070904/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

=> d stat que L83

L77	62	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	DAL FARRA C?/AU
L78	59	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	DOMLOGE N?/AU
L79	31	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	BOTTO J?/AU
L80	57	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L77 AND (L78 OR L79)
L81	7	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L78 AND L79
L83	6	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L80 AND L81

=> d stat que L86

```
L2          1 SEA FILE=REGISTRY ABB=ON  PLU=ON  158734-09-9
L5          10 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  L2
L77         62 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  DAL FARRA C?/AU
L78         59 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  DOMLOGE N?/AU
L79         31 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  BOTTO J?/AU
L86         3 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  L5 AND (L77 OR L78 OR L79)
```

=> d stat que L88

```
L2          1 SEA FILE=REGISTRY ABB=ON  PLU=ON  158734-09-9
L5          10 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  L2
L6          186 SEA FILE=REGISTRY ABB=ON  PLU=ON  ^.{0-3}RGS.{0-3}^/SQSP
L15         257 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  L6
L16         141667 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  COSMET?/CC
L17          0 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  L15 AND L16
L18         175128 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  ?COSMET?/SC,SX
L19         2257205 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  PHARM?/CC,SX,SC
L26         1741414 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  (THU OR BAC OR PKT OR PAC OR
DMA)/RL
L30         85846 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  ?COSMET?/BI
L31         215552 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  ?DERM?/BI
L32         315606 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  ?SKIN?/BI
L33          907 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  ?CELLULIT?/BI
L34         206046 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  AGING?/BI OR ANTIAGING?/BI
L40          65 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  L15 (L) L26
L47         1375243 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  GROWTH/BI
L58          4163 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  BONE GROWTH?/BI
L59          1630 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  BODY GROWTH?/BI
L61         218210 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  BONE#/BI
L73         1138160 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  GROWTH/AB
L77          62 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  DAL FARRA C?/AU
L78          59 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  DOMLOGE N?/AU
L79          31 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  BOTTO J?/AU
L87          6 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  L5 AND ((L16 OR L17 OR L18 OR
L19) OR L30 OR L40 OR (L31 OR L32 OR L33 OR L34) OR L47 OR
(L58 OR L59) OR L61 OR L73)
L88          3 SEA FILE=ZCAPLUS ABB=ON  PLU=ON  L87 AND (L77 OR L78 OR L79)
```

=> s L77-L79 and L15

```
L93          0 (L77 OR L78 OR L79) AND L15
```

=> s L83 or L86 or L88

```
L94          7 L83 OR L86 OR L88
```

=> d ibib abs hitind hitstr L94 1-7

L94 ANSWER 1 OF 7 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1036509 ZCAPLUS Full-text

DOCUMENT NUMBER: 145:404166

TITLE: Use of compounds inducing synthesis of SIRT proteins  
in or for preparing a cosmetic or pharmaceutical  
composition

INVENTOR(S): Dal Farra, Claude; Domloge, Nouha;  
Botto, Jean-Marie

PATENT ASSIGNEE(S): Societe D'Extraction Des Principes Actifs Sa  
(Vincienc), Fr.

SOURCE: PCT Int. Appl., 20pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006103356	A2	20061005	WO 2006-FR699	20060330
WO 2006103356	A3	20070322		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

FR 2883751 A1 20061006 FR 2005-3198 20050401

PRIORITY APPLN. INFO.: FR 2005-3198 A 20050401

AB The invention concerns a cosmetic or dermopharmaceutical or dermatol. composition comprising, as active principle, in a cosmetically or pharmaceutically acceptable medium, at least one compound capable of activating the synthesis of SIRT proteins in the skin cells. The invention also concerns the use of said compns. A pharmaceutical cream contained cetearyl alc. and cetearyl glucoside 6.00, squalane 3.00, Cetiol SB-45 2.00, cetearyl ethylhexanoate 3.00, mineral oil and lanolin alc. 2.00, dimethicone 1.50, BHT 0.01, butylene glycol 2.00, Gucam E10 1.00, allantoin 0.15, carbomer 0.20, avocado oil 1.25, phenonip 0.75, triethanolamine 0.18, fragrance, dyes and water q.s. 100%, and a hexapeptide of the invention 2 ppm.

IC ICM A61K

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

L94 ANSWER 2 OF 7 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1036508 ZCAPLUS Full-text

DOCUMENT NUMBER: 145:404165

TITLE: Dermatological and/or cosmetic composition containing polypeptides

INVENTOR(S): Dal Farra, Claude; Domloge, Nouha; Botto, Jean-Marie

PATENT ASSIGNEE(S): Societe D'Extraction Des Principes Actifs Sa (Vincience), Fr.

SOURCE: PCT Int. Appl., 21pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006103354	A2	20061005	WO 2006-FR697	20060330
WO 2006103354	A3	20070607		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,  
 KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,  
 MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,  
 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
 VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

FR 2883753 A1 20061006 FR 2005-3205 20050401

PRIORITY APPLN. INFO.: FR 2005-3205 A 20050401

AB The invention concerns the use of proteins of the SIRT family or polypeptide or peptide fragments of SIRT5 proteins as active principle, alone or in combination with another active principle, in or for preparing a pharmaceutical and/or dermatol. and/or cosmetic composition. The invention also concerns all composition containing said active principle. A pharmaceutical cream contained cetearyl alc. and cetearyl glucoside 6.00, squalane 3.00, Cetiol SB-45 2.00, cetearyl ethylhexanoate 3.00, mineral oil and lanolin alc. 2.00, dimethicone 1.50, BHT 0.01, butylene glycol 2.00, Gucam E10 1.00, allantoin 0.15, carbomer 0.20, avocado oil 1.25, phenonip 0.75, triethanolamine 0.18, fragrance, dyes and water q.s. 100%, and a hexapeptide of the invention 2 ppm.

IC ICM A61K

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

L94 ANSWER 3 OF 7 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1034147 ZCAPLUS Full-text

DOCUMENT NUMBER: 145:383537

TITLE: Use of compounds inducing the synthesis of SIRT proteins in or for the preparation of a cosmetic or pharmaceutical composition

INVENTOR(S): Dal Farra, Claude; Domloge, Nouha;  
 Botto, Jean-Marie

PATENT ASSIGNEE(S): Societe D'Extraction Des Principes Actifs Sa  
 (Vincience), Fr.

SOURCE: PCT Int. Appl., 20pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006103110	A1	20061005	WO 2006-EP3190	20060330
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			



FR 2883752 A1 20061006 FR 2005-3202 20050401  
 PRIORITY APPLN. INFO.: FR 2005-3202 A 20050401  
 AB The present invention concerns a cosmetic, or dermo-pharmaceutical, or dermatol. composition comprising, as an active agent in an acceptable cosmetic or pharmaceutical medium, at least one compound able to activate the synthesis of SIRT proteins in skin cells. The present invention also relates to the use of said composition  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 1, 62  
 REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L94 ANSWER 4 OF 7 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2006:1031664 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 145:403492  
 TITLE: Use of compounds inducing synthesis of SIRT proteins in or for preparing a cosmetic or pharmaceutical compositions  
 INVENTOR(S): Dal Farra, Claude; Domloge, Nouha; Botto, Jean-Marie  
 PATENT ASSIGNEE(S): Societe D'Extraction Des Principes Actifs Sa (Vincience), Fr.  
 SOURCE: PCT Int. Appl., 27pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006103352	A1	20061005	WO 2006-FR695	20060330
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

FR 2883754 A1 20061006 FR 2005-3206 20050401  
 PRIORITY APPLN. INFO.: FR 2005-3206 A 20050401  
 AB The invention concerns a cosmetic or dermopharmaceutical or dermatol. composition comprising, as active principle, in a cosmetically or pharmaceutically acceptable medium, at least one compound capable of activating the synthesis of SIRT proteins in the skin cells. The invention also concerns the use of said composition. An antiwrinkle cream contained cetearyl alc. and cetearyl glucoside 6.00, squalane 3.00, shea butter 2.00, cetyl ethylhexanoate 3.00, mineral oil and lanolin alc. 2.00, dimethicone 1.50, BHT 0.01, butylene glycol 2.00, Me gluceth-10 1.00, allantoin 0.15, carbomer 0:20, avocado oil 1.25, Phenonip 0.75, triethanolamine 0.18, fragrance, dyes, and water q.s. 100% and peptide of the invention 2 ppm.  
 CC 62-4 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 63  
 REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2006:634638 ZCAPLUS Full-text

DOCUMENT NUMBER: 145:109763

TITLE: Slimming *cosmetic* composition

INVENTOR(S): Dal Farra, Claude; Domloge, Nouha

PATENT ASSIGNEE(S): Societe D'Extraction des Principes Actifs, Fr.

SOURCE: Fr. Demande, 20 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2879925	A1	20060630	FR 2004-13792	20041223
FR 2879925	B1	20070615		

PRIORITY APPLN. INFO.: FR 2004-13792 20041223

OTHER SOURCE(S): MARPAT 145:109763

AB A *cosmetic* and/or *dermatol.* and/or pharmaceutical composition comprises combination of a peptide and a xanthan base. The composition is used for the treatment of the *cellulite* and/or decrease, eliminate, or prevent s.c. extra lipids. A cream contained Montanov-68 5.00, squalane 2.50, iso-Pr palmitate 3.50, octyldodecanol 1.50, phenonip 0.50, glycerin 3.00, butylene glycol 3.00, Simulgel EG 0.60, Arg-Gly-Ser 1.25 ppm, caffeine 1.00, fragrance and water q.s. 100%.

CC 62-4 (Essential Oils and *Cosmetics*)ST slimming *cosmetic* cream peptide xanthan lipidIT *Skin*

(*cellulite*; slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT Inflammation

(*cellulitis*; slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT *Cosmetics*

(creams; slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT Glycols, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(ethoxylated propoxylated; slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT *Cosmetics*

(gels; slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT Alcohols, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(polyhydric; slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT *Cosmetics*

Liposomes

Solvents

(slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT Bentonite, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT Peptides, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT Petrolatum  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT *Cosmetics*  
 (sprays; slimming *cosmetic* composition comprising combination of peptide and xanthan base)

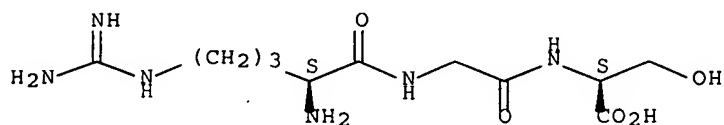
IT Fats and Glyceridic oils, biological studies  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (vegetable; slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT 57-55-6, Propylene glycol, biological studies 58-08-2, Caffeine, biological studies 58-55-9, Theophylline, biological studies 64-17-5, Ethanol, biological studies 67-63-0, Isopropanol, biological studies 71-23-8, Propanol, biological studies 83-67-0, Theobromine 110-63-4, Butylene glycol, biological studies 314-35-2, ETamiphylline 437-74-1, Xanthinol nicotinate 479-18-5, Diprophylline 519-37-9, Etophylline 603-00-9, Proxyphylline 652-37-9, Acefylline 2016-63-9, Bamiphylline 6493-05-6, Pentoxiphylline 11138-66-2, Xanthan 14807-96-6, Talcs, biological studies 17692-30-7 25265-71-8, Dipropylene glycol 53403-97-7, Pyridofylline 55242-55-2, Propentophylline 158734-09-9  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (slimming *cosmetic* composition comprising combination of peptide and xanthan base)

IT 158734-09-9  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (slimming *cosmetic* composition comprising combination of peptide and xanthan base)

RN 158734-09-9 ZCAPLUS  
 CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L94 ANSWER 6 OF 7 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:430757 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 140:428695  
 TITLE: *Cosmetic* or pharmaceutical composition comprising peptides with the sequence Arg-Gly-Ser  
 INVENTOR(S): Dal Farra, Claude; Domloge, Nouha; Botto, Jean-Marie  
 PATENT ASSIGNEE(S): Societe d'Extraction des Principes Actifs (Vincienc), Fr.

SOURCE: PCT Int. Appl., 35 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004043482	A1	20040527	WO 2003-FR3280	20031104
W: AU, BR, CA, CN, CO, DZ, ID, IL, IN, IS, JP, KR, MA, MX, NO, NZ, PL, RO, SG, UA, US, UZ, ZA				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2846883	A1	20040514	FR 2002-14012	20021108
FR 2846883	B1	20041224		
FR 2858769	A1	20050218	FR 2003-9889	20030813
FR 2858769	B1	20060210		
AU 2003292326	A1	20040603	AU 2003-292326	20031104
EP 1575605	A1	20050921	EP 2003-767892	20031104
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2006013794	A1	20060119	US 2005-534355	20050509
PRIORITY APPLN. INFO.:			FR 2002-14012	A 20021108
			FR 2003-9889	A 20030813
			WO 2003-FR3280	W 20031104

OTHER SOURCE(S): MARPAT 140:428695

AB The invention relates to the use of at least one peptide, with the sequence (AA)n-Arg-Gly-Ser-(AA)n, where (AA) is any amino acid or a derivative thereof and n = 0 to 3, as an active ingredient in or for the preparation of a *cosmetic* and/or *dermatol.* and/or pharmaceutical preparation The invention also relates to the use thereof for the treatment, amongst others, of the effects of cutaneous *aging* and/or the use thereof against *cellulite*, to a composition comprising the same and to a *cosmetic* method for the treatment of the *skin* using said peptide or said composition The amount of interacellular ATP in cultured fibroblasts and adipocytes was increased when treated with a solution of 1% Arg-Gly-Ser. Formulation of an oil-in-water prepsns. containing 1.5 ppm of above peptide is disclosed.

IC ICM A61K038-06

ICS A61K038-07; A61K038-08; A61K007-40; A61K007-48; A61P017-00

CC 62-4 (Essential Oils and *Cosmetics*)

Section cross-reference(s): 1, 63

ST *cosmetic* pharmaceutical peptide arginine glycine serine

IT *Cosmetics*

(*antiaging*; *cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

IT *Skin*

(*cellulite*; *cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

IT Peptides, biological studies

RL: COS (*Cosmetic* use); THU (*Therapeutic* use); BIOL (*Biological* study);

USES (*Uses*)

(*cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

IT *Cosmetics*

(*creams*; *cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

IT *Cosmetics*

(emulsions; *cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

IT *Cosmetics*

(gels; *cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

IT *Cosmetics*

(lotions; *cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

IT *Cosmetics*

(sprays; *cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

IT 158734-09-9

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(*cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

IT 158734-09-9

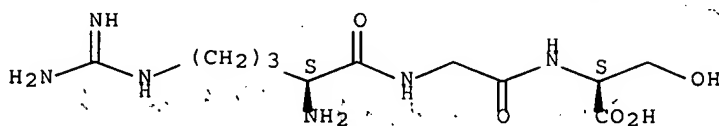
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(*cosmetic* or pharmaceutical composition comprising peptides with sequence Arg-Gly-Ser)

RN 158734-09-9 ZCAPLUS

CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT.

L94 ANSWER 7 OF 7 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:390946 ZCAPLUS Full-text

DOCUMENT NUMBER: 140:395243

TITLE: *Cosmetic* composition comprising as active ingredient at least a peptide

INVENTOR(S): Dal Farra, Claude; Domloge, Nouha; Botto, Jean Marie

PATENT ASSIGNEE(S): Vincience, Fr.

SOURCE: Fr. Demande, 25 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2846883	A1	20040514	FR 2002-14012	20021108
FR 2846883	B1	20041224		
WO 2004043482	A1	20040527	WO 2003-FR3280	20031104
W:	AU, BR, CA, CN, CO, DZ, ID, IL, IN, IS, JP, KR, MA, MX, NO, NZ, PL, RO, SG, UA, US, UZ, ZA			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,			

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 AU 2003292326            A1        20040603            AU 2003-292326            20031104  
 EP 1575605                A1        20050921            EP 2003-767892            20031104  
       R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
           IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 US 2006013794            A1        20060119            US 2005-534355            20050509  
 PRIORITY APPLN. INFO.:            FR 2002-14012            A    20021108  
    FR 2003-9889            A    20030813  
    WO 2003-FR3280            W    20031104

OTHER SOURCE(S):            MARPAT 140:395243

AB    A *cosmetic, dermatol., and/or pharmaceutical composition* comprises a peptide  
       (AA)n-Arg-Gly-Ser-(AA)n, in which (AA) is unspecified amino acid or one of its  
       derivs., and N is between 0 and 3. The peptide is for treating the  
       manifestations of cutaneous ageing and to protect the *skin* against the  
       external aggressions. Efficacy of Arg-Gly-Ser in enhancement of ATP  
       production in cultured fibroblast is shown. A lotion contained Arg-Gly-Ser  
       0.1 ppm, propylene glycol 1.00, allantoin 0.30, glycerin 1.00, Cetirol HE (PEG-  
       7 glyceryl cocoate) 1.00, preservatives 0.20, perfume 0.50, and water q.s.  
       100%.  
 IC    ICM A61K007-48  
       ICS A61K007-40; A61K038-06; A61K038-08; A61K038-07; A61P017-00  
 CC    62-4 (*Essential Oils and Cosmetics*)  
       Section cross-reference(s): 1, 63  
 ST    *antiaging cosmetic peptide*  
 IT    *Cosmetics*  
       (*antiaging; cosmetic composition* comprising as active  
       ingredient at least peptide)  
 IT    Cell differentiation  
       *Cosmetics*  
       Liposomes  
       Solvents  
       (*cosmetic composition* comprising as active ingredient at least  
       peptide)  
 IT    Petrolatum  
       RL: COS (*Cosmetic use*); BIOL (*Biological study*); USES (*Uses*)  
       (*cosmetic composition* comprising as active ingredient at least  
       peptide)  
 IT    *Cosmetics*  
       (*creams; cosmetic composition* comprising as active ingredient at  
       least peptide)  
 IT    *Cosmetics*  
       (*emulsions; cosmetic composition* comprising as active ingredient  
       at least peptide)  
 IT    *Cosmetics*  
       (*gels; cosmetic composition* comprising as active ingredient at  
       least peptide)  
 IT    Drug delivery systems  
       (*liposomes; cosmetic composition* comprising as active ingredient  
       at least peptide)  
 IT    *Cosmetics*  
       (*lotions; cosmetic composition* comprising as active ingredient at  
       least peptide)  
 IT    Alcohols, biological studies  
       RL: COS (*Cosmetic use*); BIOL (*Biological study*); USES (*Uses*)  
       (*polyhydric; cosmetic composition* comprising as active ingredient  
       at least peptide)  
 IT    *Cosmetics*  
       (*powders; cosmetic composition* comprising as active ingredient at

least peptide)

IT *Cosmetics*  
(sticks; *cosmetic* composition comprising as active ingredient at least peptide)

IT Fats and Glyceridic oils, biological studies  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(vegetable; *cosmetic* composition comprising as active ingredient at least peptide)

IT 56-65-5, Atp, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(*cosmetic* composition comprising as active ingredient at least peptide)

IT 57-55-6, Propylene glycol, biological studies 64-17-5, Ethanol, biological studies 67-63-0, Isopropanol, biological studies 71-23-8, Propanol, biological studies 9003-11-6, Polyoxyethylene polyoxypropylene glycol 25265-71-8, Dipropylene glycol 25265-75-2, Butylene glycol  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(*cosmetic* composition comprising as active ingredient at least peptide)

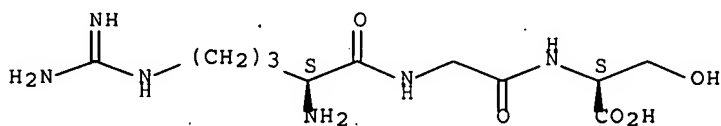
IT 158734-09-9  
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(*cosmetic* composition comprising as active ingredient at least peptide)

IT 7440-70-2, Calcium, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(intracellular; *cosmetic* composition comprising as active ingredient at least peptide)

IT 158734-09-9  
RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(*cosmetic* composition comprising as active ingredient at least peptide)

RN 158734-09-9 ZCAPLUS  
CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file registry

FILE 'REGISTRY' ENTERED AT 12:03:47 ON 05 SEP 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 SEP 2007 HIGHEST RN 946048-22-2

DICTIONARY FILE UPDATES: 4 SEP 2007 HIGHEST RN 946048-22-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=> file zcaplus

FILE 'ZCAPLUS' ENTERED AT 12:03:52 ON 05 SEP 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS is strictly prohibited.

FILE COVERS 1907 - 5 Sep 2007 VOL 147 ISS 11

FILE LAST UPDATED: 4 Sep 2007 (20070904/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

=> d stat que L25

L2	1	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	158734-09-9
L16	141667	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	COSMET?/CC
L18	175128	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	?COSMET?/SC,SX
L19	2257205	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	PHARM?/CC,SX,SC
L21	10	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L2



L22 3 SEA FILE=ZCAPLUS ABB=ON PLU=ON L21 AND L16  
 L23 3 SEA FILE=ZCAPLUS ABB=ON PLU=ON L21 AND L18  
 L24 5 SEA FILE=ZCAPLUS ABB=ON PLU=ON L21 AND L19  
 L25 6 SEA FILE=ZCAPLUS ABB=ON PLU=ON (L22 OR L23 OR L24)

=> d stat que L27

L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON 158734-09-9  
 L26 1741414 SEA FILE=ZCAPLUS ABB=ON PLU=ON (THU OR BAC OR PKT OR PAC OR  
 DMA)/RL  
 L27 4 SEA FILE=ZCAPLUS ABB=ON PLU=ON L2 (L) L26

=> d stat que L5

L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON 158734-09-9  
 L5 10 SEA FILE=ZCAPLUS ABB=ON PLU=ON L2

=> d stat que L87

L2 1 SEA FILE=REGISTRY ABB=ON PLU=ON 158734-09-9  
 L5 10 SEA FILE=ZCAPLUS ABB=ON PLU=ON L2  
 L6 186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15 257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L16 141667 SEA FILE=ZCAPLUS ABB=ON PLU=ON COSMET?/CC  
 L17 0 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND L16  
 L18 175128 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?COSMET?/SC,SX  
 L19 2257205 SEA FILE=ZCAPLUS ABB=ON PLU=ON PHARM?/CC,SX,SC  
 L26 1741414 SEA FILE=ZCAPLUS ABB=ON PLU=ON (THU OR BAC OR PKT OR PAC OR  
 DMA)/RL  
 L30 85846 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?COSMET?/BI  
 L31 215552 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?DERM?/BI  
 L32 315606 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?SKIN?/BI  
 L33 907 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?CELLULIT?/BI  
 L34 206046 SEA FILE=ZCAPLUS ABB=ON PLU=ON AGING?/BI OR ANTIAGING?/BI  
 L40 65 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 (L) L26  
 L47 1375243 SEA FILE=ZCAPLUS ABB=ON PLU=ON GROWTH/BI  
 L58 4163 SEA FILE=ZCAPLUS ABB=ON PLU=ON BONE GROWTH?/BI  
 L59 1630 SEA FILE=ZCAPLUS ABB=ON PLU=ON BODY GROWTH?/BI  
 L61 218210 SEA FILE=ZCAPLUS ABB=ON PLU=ON BONE#/BI  
 L73 1138160 SEA FILE=ZCAPLUS ABB=ON PLU=ON GROWTH/AB  
 L87 6 SEA FILE=ZCAPLUS ABB=ON PLU=ON L5 AND ((L16 OR L17 OR L18 OR  
 L19) OR L30 OR L40 OR (L31 OR L32 OR L33 OR L34) OR L47 OR  
 (L58 OR L59) OR L61 OR L73)

=> d stat que L35

L6 186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15 257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L30 85846 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?COSMET?/BI  
 L35 1 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND L30

=> d stat que L41

L6 186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15 257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L26 1741414 SEA FILE=ZCAPLUS ABB=ON PLU=ON (THU OR BAC OR PKT OR PAC OR  
 DMA)/RL  
 L30 85846 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?COSMET?/BI  
 L31 215552 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?DERM?/BI  
 L32 315606 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?SKIN?/BI

L33            907 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?CELLULIT?/BI  
 L34           206046 SEA FILE=ZCAPLUS ABB=ON PLU=ON AGING?/BI OR ANTIAGING?/BI  
 L40           65 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 (L) L26  
 L41           12 SEA FILE=ZCAPLUS ABB=ON PLU=ON L40 AND (L30 OR L31 OR L32 OR  
                  L33 OR L34)

=> d stat que L42

L6            186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15           257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L18           175128 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?COSMET?/SC,SX  
 L42           2 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND L18

=> d stat que L60

L6            186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15           257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L49           129 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PY<2003  
 L50           138 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PRY<2003  
 L51           126 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND AY<2003  
 L52           166 SEA FILE=ZCAPLUS ABB=ON PLU=ON (L49 OR L50 OR L51)  
 L58           4163 SEA FILE=ZCAPLUS ABB=ON PLU=ON BONE GROWTH?/BI  
 L59           1630 SEA FILE=ZCAPLUS ABB=ON PLU=ON BODY GROWTH?/BI  
 L60           2 SEA FILE=ZCAPLUS ABB=ON PLU=ON (L58 OR L59) AND L52

=> d stat que L62

L6            186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15           257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L49           129 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PY<2003  
 L50           138 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PRY<2003  
 L51           126 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND AY<2003  
 L52           166 SEA FILE=ZCAPLUS ABB=ON PLU=ON (L49 OR L50 OR L51)  
 L61           218210 SEA FILE=ZCAPLUS ABB=ON PLU=ON BONE#/BI  
 L62           11 SEA FILE=ZCAPLUS ABB=ON PLU=ON L61 AND L52

=> d stat que L63

L6            186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15           257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L26           1741414 SEA FILE=ZCAPLUS ABB=ON PLU=ON (THU OR BAC OR PKT OR PAC OR  
                  DMA)/RL  
 L40           65 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 (L) L26  
 L49           129 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PY<2003  
 L50           138 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PRY<2003  
 L51           126 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND AY<2003  
 L52           166 SEA FILE=ZCAPLUS ABB=ON PLU=ON (L49 OR L50 OR L51)  
 L61           218210 SEA FILE=ZCAPLUS ABB=ON PLU=ON BONE#/BI  
 L62           11 SEA FILE=ZCAPLUS ABB=ON PLU=ON L61 AND L52  
 L63           3 SEA FILE=ZCAPLUS ABB=ON PLU=ON L40 AND L62

=> d stat que L53

L6            186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15           257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L30           85846 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?COSMET?/BI  
 L31           215552 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?DERM?/BI  
 L32           315606 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?SKIN?/BI  
 L33           907 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?CELLULIT?/BI  
 L34           206046 SEA FILE=ZCAPLUS ABB=ON PLU=ON AGING?/BI OR ANTIAGING?/BI

L35	1	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L30
L36	16	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L31
L37	22	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L32
L38	0	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L33
L39	1	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L34
L49	129	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND PY<2003
L50	138	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND PRY<2003
L51	126	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND AY<2003
L52	166	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	(L49 OR L50 OR L51)
L53	20	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L52 AND (L35 OR L36 OR L37 OR L38 OR L39)

=> d stat que L64

L6	186	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	^. {0-3}RGS. {0-3}^/SQSP
L15	257	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L6
L26	1741414	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	(THU OR BAC OR PKT OR PAC OR DMA)/RL
L30	85846	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	?COSMET?/BI
L31	215552	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	?DERM?/BI
L32	315606	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	?SKIN?/BI
L33	907	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	?CELLULIT?/BI
L34	206046	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	AGING?/BI OR ANTIAGING?/BI
L35	1	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L30
L36	16	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L31
L37	22	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L32
L38	0	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L33
L39	1	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND L34
L40	65	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 (L) L26
L49	129	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND PY<2003
L50	138	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND PRY<2003
L51	126	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND AY<2003
L52	166	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	(L49 OR L50 OR L51)
L53	20	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L52 AND (L35 OR L36 OR L37 OR L38 OR L39)
L64	9	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L53 AND L40

=> d stat que L68

L6	186	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	^. {0-3}RGS. {0-3}^/SQSP
L15	257	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L6
L26	1741414	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	(THU OR BAC OR PKT OR PAC OR DMA)/RL
L40	65	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 (L) L26
L47	1375243	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	GROWTH/BI
L49	129	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND PY<2003
L50	138	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND PRY<2003
L51	126	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L15 AND AY<2003
L52	166	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	(L49 OR L50 OR L51)
L67	52	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L40 AND L52
L68	10	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L67 AND L47

=> d stat que L70

L6	186	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	^. {0-3}RGS. {0-3}^/SQSP
L15	257	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	L6
L26	1741414	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	(THU OR BAC OR PKT OR PAC OR DMA)/RL
L30	85846	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	?COSMET?/BI
L31	215552	SEA	FILE=ZCAPLUS	ABB=ON	PLU=ON	?DERM?/BI

L32 315606 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?SKIN?/BI  
 L33 907 SEA FILE=ZCAPLUS ABB=ON PLU=ON ?CELLULIT?/BI  
 L34 206046 SEA FILE=ZCAPLUS ABB=ON PLU=ON AGING?/BI OR ANTIAGING?/BI  
 L35 1 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND L30  
 L36 16 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND L31  
 L37 22 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND L32  
 L38 0 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND L33  
 L39 1 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND L34  
 L40 65 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 (L) L26  
 L49 129 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PY<2003  
 L50 138 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PRY<2003  
 L51 126 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND AY<2003  
 L52 166 SEA FILE=ZCAPLUS ABB=ON PLU=ON (L49 OR L50 OR L51)  
 L53 20 SEA FILE=ZCAPLUS ABB=ON PLU=ON L52 AND (L35 OR L36 OR L37 OR  
 L38 OR L39)  
 L70 9 SEA FILE=ZCAPLUS ABB=ON PLU=ON L53 AND L40

=> d stat que L74

L6 186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15 257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L49 129 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PY<2003  
 L50 138 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND PRY<2003  
 L51 126 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND AY<2003  
 L52 166 SEA FILE=ZCAPLUS ABB=ON PLU=ON (L49 OR L50 OR L51)  
 L73 1138160 SEA FILE=ZCAPLUS ABB=ON PLU=ON GROWTH/AB  
 L74 13 SEA FILE=ZCAPLUS ABB=ON PLU=ON L73 AND L52

=> d stat que L91

L6 186 SEA FILE=REGISTRY ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
 L15 257 SEA FILE=ZCAPLUS ABB=ON PLU=ON L6  
 L89 26504 SEA FILE=ZCAPLUS ABB=ON PLU=ON CUTANEOUS/BI  
 L91 1 SEA FILE=ZCAPLUS ABB=ON PLU=ON L15 AND L89

=> s (L25 or L27 or L5 or L87 or L35 or L41 or L42 or L60 or L62 or L63 or L53 or L64 or L68 or L70 or L74 or L91) not L94

L95 51 (L25 OR L27 OR L5 OR L87 OR L35 OR L41 OR L42 OR L60 OR L62 OR  
 L63 OR L53 OR L64 OR L68 OR L70 OR L74 OR L91) NOT L94

=> d ibib abs hitind hitstr L95 1-51

L95 ANSWER 1 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2007:793674 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 147:159832  
 TITLE: Self-activating Clostridium neurotoxins with a  
 modified cleavage site in the di-chain loop region  
 INVENTOR(S): Steward, Lance E.; Oka, Melvin S.  
 PATENT ASSIGNEE(S): Allergan, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 294pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2007166332	A1	20070719	US 2006-533223	20060919

PRIORITY APPLN. INFO.:

US 2005-718616P

P 20050919

AB Variants of Clostridial neurotoxins that can activate themselves by cleavage to the active di-chain form are described. This is achieved by replacing the cleavage site in the di-chain loop recognized by the endogenous activating proteinase with the cleavage site recognized by the toxin.

INCL 424239100; 530350000; 435069100; 435252300; 435471000

CC 4-5 (Toxicology)

Section cross-reference(s): 1, 7, 10, 62

IT 2543-43-3 54017-28-6 64134-30-1 71823-88-6 91859-00-6 92000-76-5  
 98849-88-8 103425-05-4 124388-42-7 141074-86-4 145646-22-6  
 158734-08-8 158760-86-2 164215-03-6 174144-06-0  
 188591-98-2 188591-99-3 188592-00-9 188592-01-0 188592-03-2  
 188592-04-3 188592-11-2 188592-13-4 188592-15-6 188592-17-8  
 188592-18-9 292140-90-0 305362-45-2 339988-14-6 345643-16-5  
 481710-68-3 500995-42-6 500995-43-7 501431-60-3 501431-62-5  
 501431-63-6 501431-64-7 501431-65-8 501431-66-9 677763-64-3  
 862992-84-5 878546-80-6 878546-81-7 878546-82-8 878546-83-9  
 878546-84-0 878546-85-1 878546-86-2 878546-87-3 878546-88-4  
 878546-89-5 878546-90-8 878546-92-0 878546-93-1 878546-94-2  
 878546-95-3 878546-96-4 878546-97-5 878546-98-6 878546-99-7  
 878547-00-3 878547-01-4 878547-02-5 878547-03-6 878547-04-7  
 878547-05-8 878547-06-9 943965-31-9 943965-32-0 943965-33-1  
 943965-34-2 943965-35-3 943965-36-4 943965-37-5 943965-38-6  
 943965-39-7 943965-40-0 943965-41-1 943965-42-2 943965-43-3  
 943965-44-4 943965-45-5 943965-46-6 943965-47-7 943965-48-8  
 943965-49-9 943965-50-2 943965-51-3 944017-34-9

RL: PRP (Properties)

(unclaimed sequence; self-activating Clostridium neurotoxins with modified cleavage site in di-chain loop region)

IT 158734-08-8

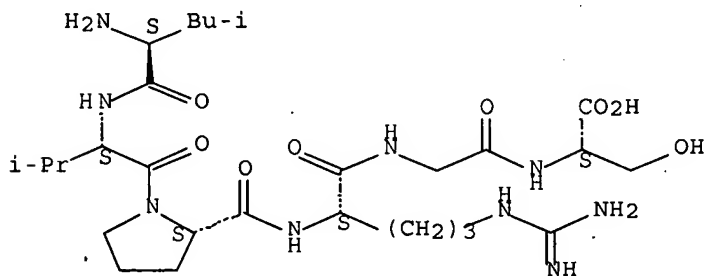
RL: PRP (Properties)

(unclaimed sequence; self-activating Clostridium neurotoxins with modified cleavage site in di-chain loop region)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 2 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1228896 ZCAPLUS Full-text

DOCUMENT NUMBER: 146:6347

TITLE: Improved nanobodies (single-domain VHH antibodies) against tumor necrosis factor-alpha, and therapeutic and diagnostic uses thereof

INVENTOR(S): Beirnaert, Els

PATENT ASSIGNEE(S): Ablynx NV, Belg.  
 SOURCE: PCT Int. Appl., 530pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006122786	A2	20061123	WO 2006-EP4678	20060517
WO 2006122786	A3	20070322		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-682332P P 20050518

AB The present invention relates to improved Nanobodies<sup>TM</sup> (Trademark of Ablynx) against Tumor necrosis factor-alpha (TNF- $\alpha$ ), as well as to polypeptides comprising or essentially consisting of one or more of such Nanobodies. Nanobodies are the smallest functional VHH fragments of naturally occurring heavy chain single-domain antibodies. Anti-TNF and anti-serum albumin nanobodies were identified using llamas (Lama glama) immunized with human TNF $\alpha$  and serum albumin. In one embodiment anti-TNF nanobody linked to anti-serum albumin nanobody via peptide linker. The invention also relates to nucleic acids encoding such Nanobodies and polypeptides; to methods for preparing such Nanobodies and polypeptides; to host cells expressing or capable of expressing such Nanobodies or polypeptides; to compns. comprising such Nanobodies, polypeptides, nucleic acids or host cells; and to uses of such Nanobodies, such polypeptides, such nucleic acids, such host cells or such compns., in particular for prophylactic, therapeutic or diagnostic purposes, such as the prophylactic, therapeutic or diagnostic purposes.

IC ICM C12N

CC 15-3 (Immunochemistry)

Section cross-reference(s): 63

IT Skin, disease

(pemphigus; improved nanobodies (single-domain VHH antibodies) against tumor necrosis factor-alpha, and therapeutic and diagnostic uses thereof)

IT Connective tissue, disease

(scleroderma; improved nanobodies (single-domain VHH antibodies) against tumor necrosis factor-alpha, and therapeutic and diagnostic uses thereof)

IT	145061-00-3	155177-31-4	883969-56-0	883969-57-1	883969-58-2
	883969-59-3	883969-60-6	883969-61-7	883969-62-8	883969-63-9
	883969-64-0	883969-65-1	883969-66-2	883969-67-3	883969-68-4
	883969-69-5	883969-70-8	883969-71-9	883969-72-0	883969-73-1
	883969-74-2	883969-75-3	883969-76-4	883969-78-6	
	915382-65-9	915382-66-0	915382-67-1	915382-68-2	915382-69-3
	915382-70-6	915382-71-7	915382-72-8	915382-73-9	915382-74-0
	915382-75-1	915382-76-2	915382-77-3	915382-78-4	915382-79-5
	915382-80-8	915382-81-9	915382-82-0	915382-83-1	915382-84-2

915382-85-3 915429-70-8 915430-05-6 915430-06-7 915430-07-8  
915430-08-9

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);  
DGN (Diagnostic use); PRP (Properties); *THU* (Therapeutic use);  
ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(amino acid sequence, nanobody fragment; improved nanobodies  
(single-domain VHH antibodies) against tumor necrosis factor-alpha, and  
therapeutic and diagnostic uses thereof)

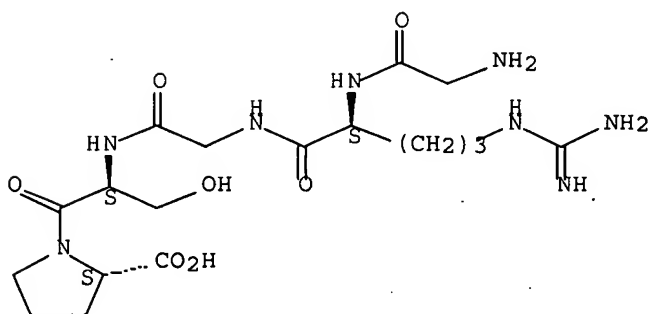
IT 883969-78-6

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);  
DGN (Diagnostic use); PRP (Properties); *THU* (Therapeutic use);  
ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(amino acid sequence, nanobody fragment; improved nanobodies  
(single-domain VHH antibodies) against tumor necrosis factor-alpha, and  
therapeutic and diagnostic uses thereof)

RN 883969-78-6 ZCAPLUS

CN L-Proline, glycyl-L-arginylglycyl-L-seryl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 3 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1173559 ZCAPLUS Full-text

DOCUMENT NUMBER: 145:466624

TITLE: Methods for cloning and synthesis of human serum  
albumin, insulin-like growth factor 1 and interferon  
 $\alpha$ 2 and 5 in tobacco plastids

INVENTOR(S): Daniell, Henry

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 70pp., Cont.-in-part of U.S.  
Ser. No. 230,299.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006253935	A1	20061109	US 2006-406522	20060418 <--
US 7129391	B1	20061031	US 1998-79640	19980515 <--
US 2003204864	A1	20031030	US 2001-807742	20010418 <--
US 2006117412	A1	20060601	US 2005-230299	20050919 <--
PRIORITY APPLN. INFO.:			US 1997-55314P	P 19970807 <--
			US 1998-79042P	P 19980323 <--

US 1998-79640	B2 19980515 <--
US 2001-263473P	P 20010123 <--
US 2001-263668P	P 20010123 <--
US 2001-807742	B1 20010418 <--
US 2005-230299	A2 20050919
US 1988-249616	B1 19880926 <--
US 1994-215020	B1 19940318 <--
US 1996-591407	A2 19960125 <--
US 2000-185987P	P 20000301 <--
US 2001-263424P	P 20010123 <--
WO 2001-US6288	W 20010228 <--

AB The present invention provides methods for cloning and synthesis of human serum albumin, insulin-like growth factor 1 and interferon  $\alpha 2$  and 5 in tobacco plastids. Transgenic chloroplast technol. provides a viable solution to the production of human serum albumin because of hyper-expression capabilities and the ability to fold and process eukaryotic proteins with disulfide bridges, thereby eliminating the need for expensive post-purification processing. Tobacco is an ideal choice because of its large biomass, ease of scale-up (million seeds per plant), genetic manipulation and impending need to explore alternate uses for this hazardous crop.

INCL 800288000; 800317300; 536023600; 435419000; 435468000

CC 3-2 (Biochemical Genetics)

Section cross-reference(s): 1, 6, 11

IT 20296-74-6 64134-30-1 77391-11-8 101992-06-7 123924-38-9  
 158734-08-8 158760-86-2 183561-63-9 911020-11-6  
 913863-77-1

RL: PRP (Properties)

(unclaimed sequence; methods for cloning and synthesis of human serum albumin, insulin-like growth factor 1 and interferon  $\alpha 2$  and 5 in tobacco plastids)

IT 158734-08-8

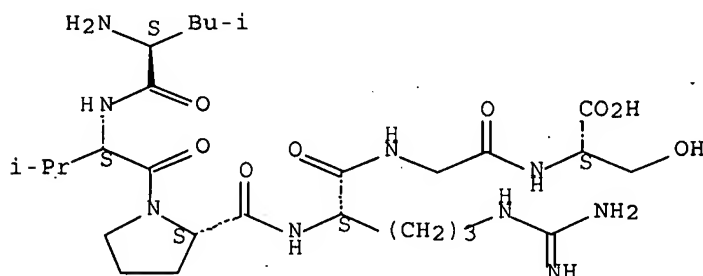
RL: PRP (Properties)

(unclaimed sequence; methods for cloning and synthesis of human serum albumin, insulin-like growth factor 1 and interferon  $\alpha 2$  and 5 in tobacco plastids)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 4 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1096719 ZCAPLUS Full-text

DOCUMENT NUMBER: 145:443762

TITLE: Peptides of von Willebrand factor A-related protein for disease treatment



INVENTOR(S): Bateman, John; Fitzgerald, David James  
PATENT ASSIGNEE(S): The Murdoch Childrens Research Institute, Australia  
SOURCE: PCT Int. Appl., 48pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006108211	A1	20061019	WO 2006-AU234	20060224
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: AU 2005-900888 A 20050225

AB The present invention relates generally to bioactive mols. More particularly, the present invention provides fragments of, or fractions comprising fragments of, von Willebrand Factor A-Related Protein (WARP) or a homolog, analog, derivative, mimetic or functional equivalent thereof. The fragments or fractions have a range of biochem., physiol. and/or pharmacol. activities including, inter alia, activities associated with stem cell proliferation, differentiation and self-renewal, coagulation, homeostasis, control of cancer growth and angiogenesis. The present invention further provides pharmaceutical compns. comprising the bioactive mols. or homologs, analogs, derivs., mimetics or functional equivalent thereof. The present invention still further provides methods for preventing and/or treating a range of diseases and conditions in a subject by the administration of the bioactive mols. or homologs, analogs, derivs., mimetics or functional equivalent thereof.

CC 63-3 (Pharmaceuticals)

IT 837-83-2	2441-63-6	2543-37-5	2650-69-3	4158-90-1	5513-86-0
5513-88-2	5874-90-8	6377-24-8	6491-25-4	6511-06-4	6514-26-7
7561-32-2	13100-15-7	13410-98-5	13433-19-7	15108-65-3	16422-05-2
17343-05-4	17585-50-1	17662-44-1	19408-48-1	20274-82-2	
20535-43-7	22028-85-9	22849-49-6	23547-60-6	23576-41-2	
23828-64-0	26001-31-0	26698-64-6	26848-21-5	30806-13-4	
32214-51-0	32302-76-4	32557-24-7	33062-84-9	33676-42-5	
34198-54-4	36301-96-9	37058-27-8	39534-89-9	42418-38-2	
45297-39-0	46823-66-9	47066-32-0	47295-77-2	47308-33-8	
47594-31-0	47688-59-5	48074-48-2	53843-93-9	54865-20-2	
54865-21-3	54907-74-3	55033-47-1	56243-95-9	56610-49-2	
57013-05-5	57694-90-3	58337-00-1	58705-26-3	58872-41-6	
58872-43-8	58872-48-3	59881-11-7	60030-20-8	60641-98-7	
61043-87-6	61043-88-7	61043-94-5	61192-07-2	61257-67-8	
61257-72-5	61430-14-6	61756-29-4	63452-86-8	66157-48-0	
66775-49-3	67341-70-2	71190-92-6	73717-21-2	74006-07-8	
74075-24-4	76046-38-3	76046-40-7	78641-45-9	78641-56-2	
82848-32-6	84668-81-5	84676-47-1	85079-94-3	85530-39-8	
85530-46-7	85530-63-8	85774-49-8	85775-46-8	85806-91-3	
85807-16-5	85807-17-6	85807-20-1	85807-24-5	85807-30-3	

85807-31-4	86416-46-8	86713-34-0	87494-16-4	89375-49-5
90038-05-4	91408-60-5	92116-80-8	93128-07-5	93993-14-7
94908-11-9	95500-91-7	96817-14-0	97812-06-1	98144-15-1
98985-51-4	101059-48-7	103429-51-2	105052-44-6	105219-98-5
108885-48-9	109173-96-8	110025-18-8	110767-12-9	110767-17-4
110784-03-7	110862-98-1	110863-01-9	110900-43-1	113904-09-9
114019-68-0	115053-54-8	116685-18-8	117058-00-1	117526-99-5
119256-59-6	119417-74-2	119567-78-1	120706-99-2	121282-30-2
121822-47-7	123195-99-3	125551-89-5	126855-24-1	126855-32-1
126869-50-9	128500-64-1	129250-76-6	130944-60-4	130944-64-8
132151-24-7	132365-81-2	132548-09-5	133943-59-6	134248-97-8
134368-91-5	134950-71-3	136134-15-1	137427-67-9	137505-30-7
137689-45-3	140670-79-7	140716-07-0	141073-83-8	142584-45-0
145230-09-7	146321-24-6	148696-83-7	148777-88-2	148860-45-1
152603-14-0	154673-90-2	154858-15-8	156472-24-1	156648-63-4
158401-55-9	158551-75-8	158734-09-9	166601-47-4	
169249-04-1	171627-93-3	172781-51-0	172781-53-2	174753-75-4
175175-43-6	175175-47-0	175175-65-2	175176-67-7	175176-83-7
175177-53-4	175177-54-5	175177-58-9	175177-66-9	178913-64-9
178913-70-7	178951-06-9	180511-32-4	185907-89-5	189109-89-5
204644-00-8	204644-11-1	204644-15-5	204644-19-9	205109-93-9
208535-25-5	208535-38-0	210353-26-7	210880-01-6	210887-98-2
213267-77-7	243647-63-4	248257-94-5	248257-95-6	248257-97-8
248258-41-5	250636-22-7	251471-80-4	251471-82-6	253170-81-9
265110-26-7	286382-63-6	290312-62-8	292171-12-1	293290-59-2
298184-91-5	298184-94-8	305806-14-8	313228-22-7	314773-66-5
321872-37-1	321878-21-1	325962-97-8	327989-84-4	

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(peptides of WARP (von Willebrand factor A-related protein) for disease treatment)

IT 158734-09-9

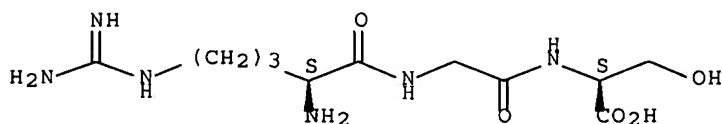
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(peptides of WARP (von Willebrand factor A-related protein) for disease treatment)

RN 158734-09-9 ZCAPLUS

CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 5 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:657345 ZCAPLUS Full-text

DOCUMENT NUMBER: 145:117443

TITLE: VEGF antagonistic monomeric mini-traps comprising Ig domains of VEGF receptors for treatment of eye disorders

INVENTOR(S): Daly, Thomas J.; Fandl, James P.; Papadopoulos, Nicholas J.

PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S.  
 Ser. No. 880,021.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 10  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006148705	A1	20060706	US 2006-346008	20060202
US 2004014667	A1	20040122	US 2003-609775	20030630 <--
US 7087411	B2	20060808		
US 2005043236	A1	20050224	US 2004-880021	20040629
PRIORITY APPLN. INFO.:			US 2003-609775	A2 20030630
			US 2004-880021	A2 20040629
			US 1999-138133P	P 19990608 <--
			WO 2000-US14142	W 20000523 <--
			US 2001-9852	A2 20011206 <--

AB The invention provides nucleic acid sequences encoding fusion proteins (traps) which bind and inhibit vascular endothelial growth factor (VEGF). The fusion proteins consist of an Ig-like (Ig) domain 2 of a first VEGF receptor (Flt-1) and Ig domain 3 of a second VEGF receptor (Flk-1). The invention describes VEGF-receptor-based antagonistic VEGF traps, such as Flt1D2.Flk1D3.FcΔC1(a) and VEGFR1R2-FcΔC1(a). In a particular embodiment, the fusion proteins of the invention are smaller than the full sized traps, e.g., about 50-60 kD vs. 120 kD of the parent trap, and are monomers. The VEGF mini-traps exhibit unique kinetic properties yet retain a high binding affinity to VEGF. The VEGF traps are therapeutically useful for treating VEGF-associated conditions and diseases, such as ocular diseases.

INCL 514012000; 530350000; 435069700; 435320100; 435325000; 536023500

CC 1-12 (Pharmacology)

Section cross-reference(s): 2, 3

IT Aging, animal

(eye disorder related to; VEGF antagonistic monomeric mini-traps comprising Ig domains of VEGF receptors for treatment of eye disorders)

IT 158734-08-8 160597-73-9 644994-65-0

RL: PRP (Properties)

(unclaimed sequence; vEGF antagonistic monomeric mini-traps comprising Ig domains of VEGF receptors for treatment of eye disorders)

IT 158734-08-8

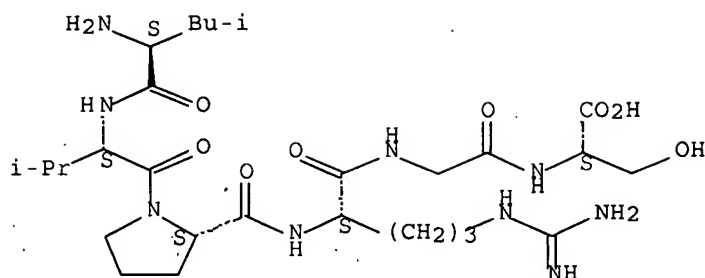
RL: PRP (Properties)

(unclaimed sequence; vEGF antagonistic monomeric mini-traps comprising Ig domains of VEGF receptors for treatment of eye disorders)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 6 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2006:470311 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 144:464099  
 TITLE: Antimicrobial peptides derived from Bac2A and screening assay  
 INVENTOR(S): Hancock, Robert, E., W.; Hilpert, Kai  
 PATENT ASSIGNEE(S): The University of British Columbia, Can.  
 SOURCE: PCT Int. Appl., 127 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006050611	A1	20060518	WO 2005-CA1731	20051114
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1824976	A1	20070829	EP 2005-803322	20051114
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRIORITY APPLN. INFO.:			US 2004-627356P	P 20041112
			WO 2005-CA1731	W 20051114

OTHER SOURCE(S): MARPAT 144:464099

AB A novel class of peptides having antimicrobial activity is provided based on the antimicrobial peptide Bac2A (RLARIVVIRVAR-NH<sub>2</sub>), which is known to kill both Gram-pos. and Gram-neg. bacterial. Relationships between structure and activity is derived from 2165 variants created through sequence scrambling, truncations, and systematic modifications of peptide sequence. The best peptide variant, Bac020 (RRAAVVLIVIRR), had a very low MIC (7 µg/mL) against *Pseudomonas aeruginosa* and other bacteria, compared to the parent mol. Bac2A, and had no cytotoxic effect at 100 µg/Ml against a human macrophage cell line. Also provided are methods for inhibiting the growth of bacteria utilizing the peptides of the invention. A reporter system for screening antimicrobial

activity comprises bacterial luciferase inserted into the *fliC* gene in *Pseudomonas aeruginosa*.

CC 10-5 (Microbial, Algal, and Fungal Biochemistry)

Section cross-reference(s): 1, 9

IT *Enterococcus faecalis*

*Escherichia coli*

Eubacteria

Gram-negative bacteria

Gram-positive bacteria

*Pseudomonas aeruginosa*

*Salmonella enterica typhimurium*

*Staphylococcus aureus*

*Staphylococcus epidermidis*

(inhibition of growth of; antimicrobial peptides derived from Bac2A and screening assay)

IT	886549-99-1	886550-00-1	886550-01-2	886550-02-3	886550-03-4
	886550-04-5	886550-05-6	886550-06-7	886550-07-8	886550-08-9
	886550-09-0	886550-10-3	886550-11-4	886550-12-5	886550-13-6
	886550-14-7	886550-15-8	886550-16-9	886550-17-0	886550-18-1
	886550-19-2	886550-20-5	886550-21-6	886550-22-7	886550-23-8
	886550-24-9	886550-25-0	886550-26-1	886550-27-2	886550-28-3
	886550-29-4	886550-30-7	886550-31-8	886550-32-9	886550-33-0
	886550-34-1	886550-35-2	886550-36-3	886550-37-4	886550-38-5
	886550-39-6	886550-40-9	886550-41-0	886550-42-1	886550-43-2
	886550-44-3	886550-45-4	886550-46-5	886550-47-6	886550-48-7
	886550-49-8	886550-50-1	886550-51-2	886550-52-3	886550-53-4
	886550-54-5	886550-55-6	886550-56-7	886550-57-8	886550-58-9
	886550-59-0	886550-60-3	886550-61-4	886550-62-5	886550-63-6
	886550-64-7	886550-65-8	886550-66-9	886550-67-0	886550-68-1
	886550-69-2	886550-70-5	886550-71-6	886550-72-7	886550-73-8
	886550-74-9	886550-75-0	886550-76-1	886550-77-2	886550-78-3
	886550-79-4	886550-80-7	886550-81-8	886550-82-9	886550-83-0
	886550-84-1	886550-85-2	886550-86-3	886550-87-4	886550-88-5
	886550-89-6	886550-90-9	886550-91-0	886550-92-1	886550-93-2
	886550-94-3	886550-95-4	886550-96-5	886550-97-6	886550-98-7
	886550-99-8	886551-00-4	886551-01-5	886551-02-6	886551-03-7
	886551-04-8	886551-05-9	886551-06-0	886551-07-1	886551-08-2
	886551-09-3	886551-10-6	886551-11-7	886551-12-8	886551-13-9
	886551-14-0	886551-15-1	886551-16-2	886551-17-3	886551-18-4
	886551-19-5	886551-20-8	886551-21-9	886551-22-0	886551-23-1
	886551-24-2	886551-25-3	886551-26-4	886551-27-5	886551-28-6
	886551-29-7	886551-30-0	886551-31-1	886551-32-2	886551-33-3
	886551-34-4	886551-35-5	886551-36-6	886551-37-7	886551-38-8
	886551-39-9	886551-40-2	886551-41-3	886551-42-4	886551-43-5
	886551-44-6	886551-45-7	886551-46-8	886551-47-9	886551-48-0
	886551-49-1	886551-50-4	886551-51-5	886551-52-6	886551-53-7
	886551-54-8	886551-55-9	886551-56-0	886551-57-1	886551-58-2
	886551-59-3	886551-60-6	886551-61-7	886551-62-8	886551-63-9
	886551-64-0	886551-65-1	886551-66-2	886551-67-3	886551-68-4
	886551-69-5	886551-70-8	886551-71-9	886551-72-0	886551-73-1
	886551-74-2	886551-75-3	886551-76-4	886551-77-5	886551-78-6
	886551-79-7	886551-80-0	886551-81-1	886551-82-2	886551-83-3
	886551-84-4	886551-85-5	886551-86-6	886551-87-7	886551-88-8
	886551-89-9	886551-90-2	886551-91-3	886551-92-4	886551-93-5
	886551-94-6	886551-95-7	886551-96-8	886551-97-9	886551-98-0
	886551-99-1	886552-00-7	886552-01-8	886552-02-9	886552-03-0
	886552-04-1	886552-05-2	886552-06-3	886552-07-4	886552-08-5
	886552-09-6	886552-10-9	886552-11-0	886552-12-1	
	886552-13-2	886552-14-3	886552-15-4	886552-16-5	886552-17-6
	886552-18-7	886552-19-8	886552-20-1	886552-21-2	886552-22-3

886552-23-4 886552-24-5 886552-25-6 886552-26-7 886552-27-8  
 886552-28-9 886552-29-0 886552-30-3 886552-31-4 886552-32-5  
 886552-33-6 886552-34-7

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(sequence; antimicrobial peptides derived from Bac2A and screening assay)

IT 886552-09-6

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

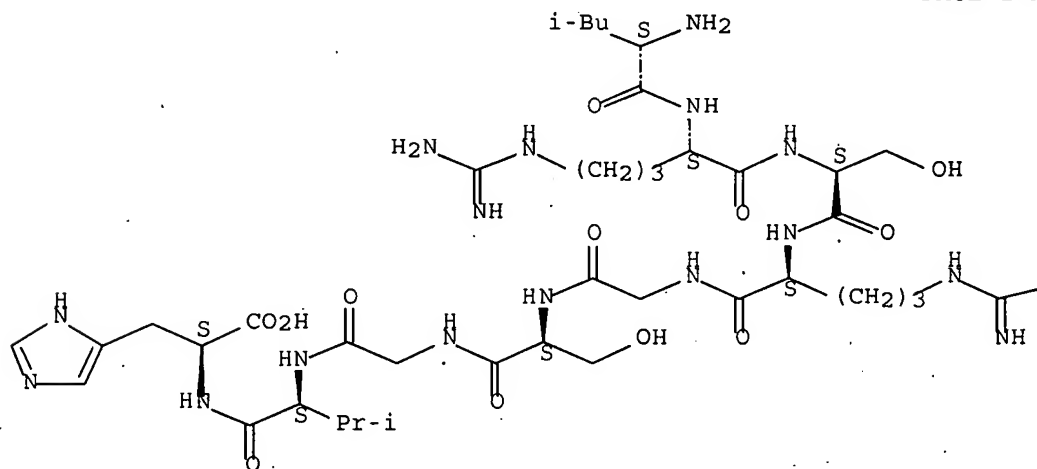
(sequence; antimicrobial peptides derived from Bac2A and screening assay)

RN 886552-09-6 ZCAPLUS

CN L-Histidine, L-leucyl-L-arginyl-L-seryl-L-arginylglycyl-L-serylglycyl-L-valyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

NH2

REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 7 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2006:456993 ZCAPLUS Full-text

DOCUMENT NUMBER: 144:474844

TITLE: Conjugates with enhanced cell uptake activity

INVENTOR(S): Bonny, Christophe; Coquoz, Didier; Chen, Jianhua

PATENT ASSIGNEE(S): Xigen S.A., Switz.

SOURCE: Eur. Pat. Appl., 65 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1656951	A1	20060517	EP 2004-26934	20041112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR, IS, YU				
AU 2005303949	A1	20060518	AU 2005-303949	20051109
CA 2585421	A1	20060518	CA 2005-2585421	20051109
WO 2006050930	A2	20060518	WO 2005-EP11991	20051109
WO 2006050930	A3	20070426		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
EP 1809334	A2	20070725	EP 2005-811041	20051109
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				

PRIORITY APPLN. INFO.:

EP 2004-26934 A 20041112

WO 2005-EP11991 W 20051109

AB This invention relates to a conjugate mol. comprising at least one first portion (I) comprising a carrier sequence and at least one second portion (II) comprising at least one anti-tumor drug mol. or a protease inhibitor mol., said conjugate mol. comprising D-enantiomeric amino acids in its portion (I). Furthermore, the invention relates to pharmaceutical compns. containing said conjugate mol. as well as to the use of said conjugate mol. for therapeutical treatment. Methods for improving cell permeability are disclosed as well.

CC 63-5 (Pharmaceuticals)

IT Alkylating agents, biological

Antitumor agents

Brain, neoplasm

Cytotoxic agents

Digestive tract, neoplasm

Hodgkin's disease

Lung, neoplasm

Melanoma

Molecular weight distribution

Neoplasm

Ovary, neoplasm

Permeation enhancers

Skin, neoplasm

(D-enantiomeric peptide conjugates with enhanced cell uptake activity)

IT 15663-27-1D, Cisplatin, peptide conjugates 886463-43-0 886463-44-1  
 886463-45-2 886463-46-3 886463-47-4 886463-48-5 886463-49-6  
 886463-50-9 886463-51-0 886463-52-1 886463-53-2 886463-54-3  
 886463-55-4 886463-56-5 886463-57-6 886463-58-7  
 886463-59-8 886463-60-1 886463-61-2 886463-62-3 886463-63-4  
 886463-64-5 886463-65-6 886463-67-8 886463-68-9 886463-69-0  
 886463-70-3 886463-71-4 886463-72-5 886463-73-6 886463-74-7  
 886463-75-8 886463-76-9 886463-77-0 886463-78-1 886463-80-5

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(D-enantiomeric peptide conjugates with enhanced cell uptake activity)

IT 886463-55-4

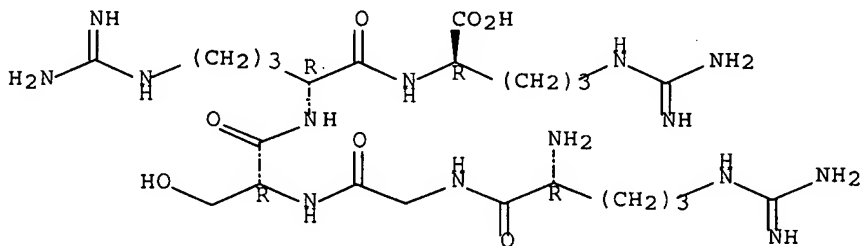
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(D-enantiomeric peptide conjugates with enhanced cell uptake activity)

RN 886463-55-4 ZCAPLUS

CN D-Arginine, D-arginylglycyl-D-seryl-D-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 8 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:273367 ZCAPLUS Full-text

DOCUMENT NUMBER: 144:286170

TITLE: Sulfatase domains, anti-sulfatase antibodies, and anti-sulfatase siRNAs for cancer treatment

INVENTOR(S): Naworth, Roman; Rosen, Steven

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 81 pp., Cont.-in-part of U.S. Ser. No. 265,071.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006063230	A1	20060323	US 2005-219360	20050902 <--
US 2003148920	A1	20030807	US 2001-25966	20011221 <--





PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006026780	A1	20060309	WO 2005-US31613	20050901
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005279741	A1	20060309	AU 2005-279741	20050901
CA 2578911	A1	20060309	CA 2005-2578911	20050901
EP 1784420	A1	20070516	EP 2005-795616	20050901
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRIORITY APPLN. INFO.:			US 2004-931719	A 20040901
			WO 2005-US31613	W 20050901
AB	The specification discloses modified Clostridial toxins comprising a PAR ligand domain, a Clostridial toxin enzymic domain, a Clostridial toxin translocation domain and a Clostridial toxin binding domain; polynucleotide mols. encoding modified Clostridial toxins comprising a PAR ligand domain, a Clostridial toxin enzymic domain, a Clostridial toxin translocation domain and a Clostridial toxin binding domain; and method of producing modified Clostridial toxins comprising a PAR ligand domain, a Clostridial toxin enzymic domain, a Clostridial toxin translocation domain and a Clostridial toxin binding domain. The clostridial toxin is a modified BoNT/A, BoNT/B, BoNT/C, BoNT/D, BoNT/E, BoNT/F, BoNT/G or TeNT (tetanus toxin).			
CC	4-5 (Toxicology) Section cross-reference(s): 1, 3, 15, 62			
ST	clostridial toxin PAR ligand enzymic translocation binding domain therapeutic; <i>cosmetic</i> BoNTA BoNTB BoNTC BoNTD BoNTE BoNTF BoNTG TeNT			
IT	Transforming growth factors RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (1-3 derivs.; binding domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and <i>cosmetic</i> uses)			
IT	Clostridium botulinum (A; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and <i>cosmetic</i> uses)			
IT	Clostridium botulinum (B; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and <i>cosmetic</i> uses)			
IT	Clostridium botulinum (C; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and <i>cosmetic</i> uses)			
IT	Clostridium botulinum (D; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and <i>cosmetic</i>			

uses)

IT Clostridium botulinum  
(E; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Clostridium botulinum  
(F; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Clostridium botulinum  
(G; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Human  
(PAR protein; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Thrombin receptors  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(PAR-1 (proteinase-activated receptor 1), ligand domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Proteinase-activated receptors  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(PAR-1, ligand domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Proteinase-activated receptors  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(PAR-2, ligand domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Thrombin receptors  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(PAR-3 (proteinase-activated receptor 3), ligand domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Proteinase-activated receptors  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(PAR-3, ligand domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Thrombin receptors  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(PAR-4 (proteinase-activated receptor 4), ligand domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Proteinase-activated receptors

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(PAR-4, ligand domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and cosmetic uses)

IT Ligands

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(PAR; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and cosmetic uses)

IT Antigens

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(Thy-1; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and cosmetic uses)

IT Interleukin 1

Interleukin 8

Tumor necrosis factors

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(binding domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and cosmetic uses)

IT Ciliary neurotrophic factor

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(binding domain; derivs.; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and cosmetic uses)

IT Toxoids

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(botulin, derivs.; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and cosmetic uses)

IT Neurotrophic factors

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(brain-derived, derivs.; binding domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and cosmetic uses)

IT Antitumor agents

Cardiovascular system, disease

Clostridium botulinum

Cosmetics

DNA sequences

Drugs

Ear, disease

Endocrine system, disease

Eye, disease

Headache

Mammalia

Mental and behavioral disorders

Molecular cloning

Neoplasm

Neuromuscular diseases

Pain

Protein sequences

(degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Polynucleotides

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Antibodies and Immunoglobulins

RL: BSU (Biological study, unclassified); COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Leukemia inhibitory factor

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(derivs.; binding domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Neuron

(dorsal root ganglion; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Protein motifs

(enzymic, translocation or binding domains; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Skin, disease

(hyperkinetic facial lines; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Muscle, disease

(injury; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Epitopes

(lactoseries carbohydrate; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Carbohydrates, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(lactoseries; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Proteinase-activated receptors

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(ligand domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Antibodies and Immunoglobulins  
 RL: BSU (Biological study, unclassified); COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (monoclonal; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Injury  
 (muscular; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Nerve, disease  
 (neuropathy; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Ganglion  
 (spinal, neurons; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Toxins  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (tetanus, derivs.; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT Cosmetics  
 (wrinkle-preventing; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT 878634-81-2P 878634-82-3P 878634-83-4P 878634-84-5P 878634-85-6P  
 878634-86-7P 878634-87-8P 878634-88-9P 878634-89-0P 878634-90-3P  
 878634-91-4P 878634-92-5P 878634-93-6P 878634-94-7P 878634-95-8P  
 878634-96-9P 878634-97-0P 878634-98-1P 878634-99-2P 878635-00-8P  
 878635-01-9P 878635-02-0P 878635-03-1P 878635-04-2P  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (amino acid sequence; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT 58-82-2DP, Bradykinin, derivs. 9061-61-4DP, Nerve growth factor, derivs. 14521-96-1DP, Etorphine, derivs. 58569-55-4DP, Met-enkephalin, derivs. 58822-25-6DP, Leu-enkephalin, derivs. 60617-12-1DP,  $\beta$ -Endorphin, derivs. 61380-40-3DP, Lofentanil, derivs. 62229-50-9DP, Epidermal growth factor, derivs. 74913-18-1DP, Dynorphin, derivs. 79943-68-3DP, Hydra head activator peptide, derivs. 106096-93-9DP, Basic fibroblast growth factor, derivs. 119418-04-1DP, Galanin, derivs. 130939-66-1DP, Neurotrophin 3, derivs. 141801-26-5DP, Endomorphin 2, derivs. 170713-75-4DP, Nociceptin, derivs. 189388-22-5DP, Endomorphin 1, derivs.  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (binding domain; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and *cosmetic* uses)

IT 9001-92-7DP, Protease, derivs. 9002-04-4DP, Thrombin, derivs. 9002-05-5DP, Blood-coagulation factor Xa, derivs. 9002-07-7DP, Trypsin,

derivs.

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)

(cleavage site; degradable clostridial toxins comprising PAR ligand,  
enzymic, translocation, and binding domains for therapeutic and  
*cosmetic* uses)

IT 93384-43-1DP, Botulin A, fusion proteins 93384-44-2DP, Botulin B, fusion  
proteins 93384-45-3DP, Botulin C, fusion proteins 93384-46-4DP,  
Botulin D, fusion proteins 93384-47-5DP, Botulin E, fusion proteins  
107231-15-2DP, Botulin F, fusion proteins 107231-16-3DP, Botulin G,  
fusion proteins 140436-67-5DP, derivs. 141136-85-8DP, derivs.  
164081-25-8DP, derivs. 202933-49-1DP, derivs. 213018-42-9DP, derivs.  
225779-44-2DP, derivs. 320347-28-2DP, derivs. 380900-00-5DP, derivs.  
380900-02-7DP, derivs. 380900-04-9DP, derivs. 380900-06-1DP, derivs.  
380900-12-9DP, derivs. 380900-14-1DP, derivs. 380900-16-3DP, derivs.  
380900-22-1DP, derivs. 380900-24-3DP, derivs. 380900-26-5DP, derivs.  
380900-28-7DP, derivs. 380900-30-1DP, derivs. 380900-32-3DP, derivs.  
380900-58-3DP, derivs. 459123-99-0DP, derivs. 878546-58-8DP, derivs.  
878546-68-0DP, derivs. 878546-72-6DP, derivs. 878547-07-0DP, derivs.  
878547-08-1DP, derivs. 878547-09-2DP, derivs. 878634-75-4DP, derivs.  
878634-76-5DP, derivs. 878634-77-6DP, derivs. 878634-78-7DP, derivs.  
878634-79-8DP, derivs. 878634-80-1DP, derivs.

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)

(degradable clostridial toxins comprising PAR ligand, enzymic,  
translocation, and binding domains for therapeutic and *cosmetic*  
uses)

IT 878635-05-3P 878635-06-4P 878635-07-5P 878635-08-6P 878635-09-7P  
878635-10-0P 878635-11-1P 878635-12-2P 878635-13-3P 878635-14-4P  
878635-15-5P 878635-16-6P 878635-17-7P 878635-18-8P 878635-19-9P  
878635-20-2P 878635-21-3P 878635-22-4P 878635-23-5P 878635-24-6P  
878635-25-7P 878635-26-8P 878635-27-9P 878635-28-0P 878635-29-1P  
878635-30-4P 878635-31-5P 878635-32-6P 878635-33-7P 878635-34-8P  
878635-35-9P 878635-36-0P 878635-37-1P 878635-38-2P 878635-39-3P  
878635-40-6P 878635-41-7P 878635-42-8P 878635-43-9P 878635-44-0P  
878635-45-1P 878635-46-2P 878635-47-3P 878635-48-4P 878635-49-5P  
878635-50-8P 878635-51-9P 878635-52-0P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);  
COS (Cosmetic use); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)

(nucleotide sequence; degradable clostridial toxins comprising PAR  
ligand, enzymic, translocation, and binding domains for therapeutic and  
*cosmetic* uses)

IT 878640-10-9 878640-11-0 878640-12-1 878640-13-2 878640-14-3  
878640-15-4 878640-16-5 878640-17-6 878640-18-7 878640-19-8  
878640-20-1 878640-21-2 878640-23-4

RL: PRP (Properties)

(unclaimed protein sequence; degradable clostridial toxins comprising  
PAR ligand, enzymic, translocation, and binding domains for therapeutic  
and *cosmetic* uses)

IT 2543-43-3 54017-28-6 91859-00-6 124388-42-7 158734-08-8  
158760-86-2 164215-03-6 305362-45-2 345643-16-5 878546-80-6  
878546-81-7 878546-82-8 878546-83-9 878546-84-0 878546-85-1  
878546-86-2 878546-87-3 878546-88-4 878546-89-5 878546-90-8  
878546-92-0 878546-93-1 878546-94-2 878546-95-3 878546-96-4  
878546-97-5 878546-98-6 878546-99-7 878547-00-3 878547-01-4  
878547-02-5 878547-03-6 878547-04-7 878547-05-8 878547-06-9

RL: PRP (Properties)

(unclaimed sequence; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and cosmetic uses)

IT 158734-08-8

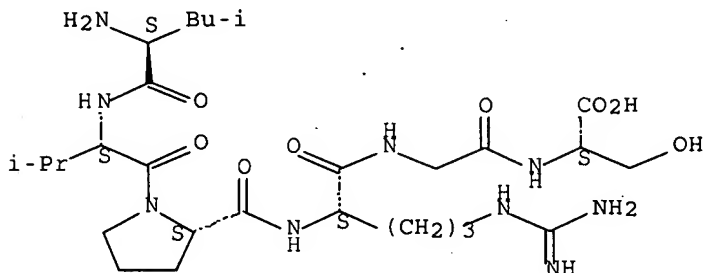
RL: PRP (Properties)

(unclaimed sequence; degradable clostridial toxins comprising PAR ligand, enzymic, translocation, and binding domains for therapeutic and cosmetic uses)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 10 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:138453 ZCAPLUS Full-text

DOCUMENT NUMBER: 144:318461

TITLE: Active fragment GSLL-39 of recombinant human cationic antimicrobial protein 18 (mhCAP-18) and use for treating bacterial infection

INVENTOR(S): Wu, Kefu; Zheng, Guoguang; Yang, Yinghua; Li, Ge; Rao, Qing

PATENT ASSIGNEE(S): Institute of Hematology, Chinese Academy of Medical Sciences, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 31 pp.  
CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1597695	A	20050323	CN 2003-144286	20030917
PRIORITY APPLN. INFO.:			CN 2003-144286	20030917

AB The invention provides protein sequence of active fragment GSLL-39 produced from recombinant human cationic antimicrobial protein 18 (mhCAP-18) by thrombase digesting. The recombinant mhCAP-18 is generated via PCR method, expressing mhCAP-18 in prokaryotic cell Escherichia coli BL21trxB(DE3) transfected with plasmid pET-mhCAP-18, purifying mhCAP-18 via ultrasonic centrifugation and chromatog., then digesting mhCAP-18 with thrombase to obtain antimicrobial active fragment GSLL-39, purifying GSLL-39 via SP Ni<sup>2+</sup> exchange chromatog., sterilizing, concentrating and freeze drying. The invention also relates to application of GSLL-39 for preventing and treating



hCAP-18/LL-37 related diseases, such as infective disease, skin injury repair or infective shock caused by gram-neg. bacteria.

IC ICM C07K014-435

ICS A61K038-17; C12N015-63; A61P031-04; A61P017-02; C07K014-47

CC 63-3 (Pharmaceuticals)

Section cross-reference(s): 3, 6, 10, 13

IT Injury

(cutaneous, healing; active fragment GSLL-39 of recombinant human cationic antimicrobial protein 18 (mhCAP-18) and use for treating bacterial infection)

IT 158734-08-8 879227-20-0 879227-21-1 879227-22-2

879227-23-3 879227-24-4 879227-25-5

RL: PRP (Properties)

(unclaimed sequence; active fragment GSLL-39 of recombinant human cationic antimicrobial protein 18 (mhCAP-18) and use for treating bacterial infection)

IT 158734-08-8

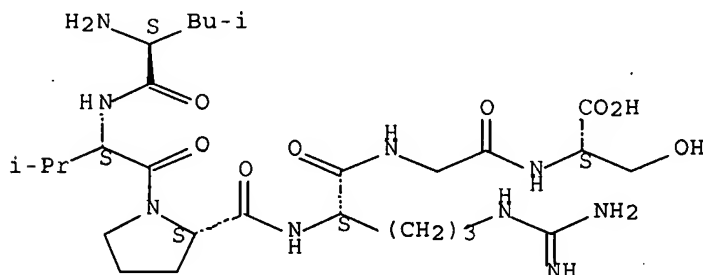
RL: PRP (Properties)

(unclaimed sequence; active fragment GSLL-39 of recombinant human cationic antimicrobial protein 18 (mhCAP-18) and use for treating bacterial infection)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 11 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:74856 ZCAPLUS Full-text

DOCUMENT NUMBER: 144:169521

TITLE: Heteroclitic peptide analogs of major histocompatibility complex class I antigen epitopes  
INVENTOR(S): Ishioka, Glenn; Fikes, John; Tangri, Shabnam; Sette, Alessandro

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 130 pp., Cont.-in-part of U.S. Ser. No. 116,118.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006018915	A1	20060126	US 2005-510101	20050713 <--

US 2003143672	A1	20030731	US 2002-116118	20020405 <--
WO 2003087126	A2	20031023	WO 2003-US10571	20030407 <--
WO 2003087126	A3	20041028		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2002-116118	A2	20020405 <--
US 2002-413471P	P	20020926 <--
WO 2003-US10571	W	20030407
US 1999-166529P	P	19991118 <--
US 2000-239008P	P	20001006 <--
WO 2000-US31856	A2	20001120 <--

AB Heteroclitic analogs of major histocompatibility complex (MHC) class I epitopes are prepared by providing conservative, semi-conservative, or non-conservative amino acid substitutions at any combination of positions 3-10 of these epitopes, resulting in peptides having increased stimulatory capacity or potency for a specific T cell. Several different cytotoxic T cell lines screened for reactivity against panels of analogs yielded rules for designing heteroclitics. Modification of T cell stimulatory capacity was achieved with no alteration of the primary MHC anchors. The wild-type epitopes include tumor epitopes derived from self-antigens that are specifically up-regulated in epithelial cell cancers and have been shown to be immunogenic, including CEA (carcinoembryonic antigen), MAGE2 (melanoma antigen 2), the polymerases from HIV and hepatitis B viruses, and p53. Thus, certain analogs of wild-type epitope CEA.691 (IMIGVLGV) stimulated significant release of interferon- $\gamma$  with as little as 0.01 ng/mL of peptide, and on a molar basis are 100,000-fold more potent than their unmodified wild-type counterpart. The analogs are useful in eliciting immune responses with respect to the corresponding wild-type epitopes.

INCL 424184100; 435069100; 435320100; 435325000; 530350000; 536023500

CC 15-2 (Immunochemistry)

Section cross-reference(s): 1

IT Skin

(Langerhans cell; heteroclitic peptide analogs of major histocompatibility complex class I antigen epitopes)

IT 151456-29-0 151808-66-1 341484-43-3 341484-44-4 341484-45-5  
341484-46-6 342003-29-6 342003-30-9 342003-31-0 342003-32-1  
342003-34-3

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(analog of p53 wild-type epitope; heteroclitic peptide analogs of major histocompatibility complex class I antigen epitopes)

IT 342003-34-3

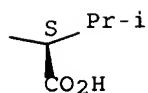
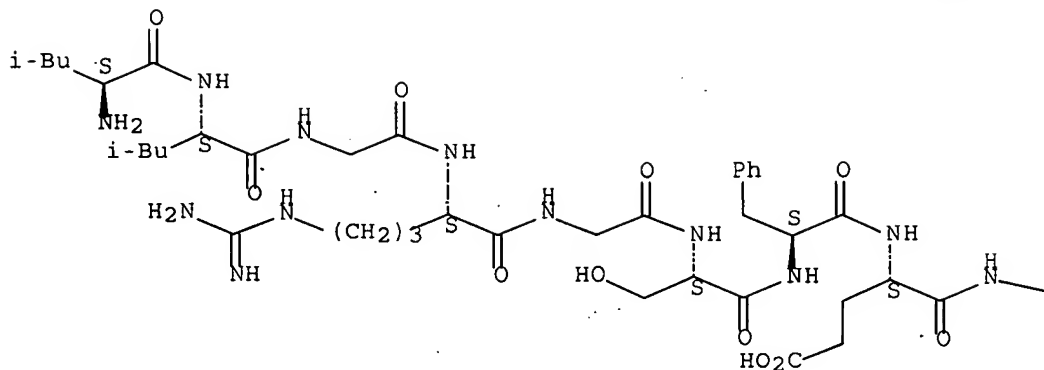
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(analog of p53 wild-type epitope; heteroclitic peptide analogs of major histocompatibility complex class I antigen epitopes)

RN 342003-34-3 ZCAPLUS

CN L-Valine, L-leucyl-L-leucylglycyl-L-arginylglycyl-L-seryl-L-phenylalanyl-L- $\alpha$ -glutamyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 12 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2006:13711 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 144:106605  
 TITLE: Hybrid peptides comprising Ii-Key peptide and  
 antigenic epitope as vaccines against infection,  
 allergy and cancer  
 INVENTOR(S): Humphreys, Robert; Xu, Minzhen  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 142 pp., Cont.-in-part of U.S.  
 Ser. No. 245,871.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006002947	A1	20060105	US 2005-33039	20050111 <--
US 6432409	B1	20020813	US 1999-396813	19990914 <--
US 2003091582	A1	20030515	US 2002-197000	20020717 <--

US 7205274 B2 20070417  
 US 2003235594 A1 20031225 US 2002-245871 20020917 <--  
 WO 2006076410 A2 20060720 WO 2006-US944 20060111

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,  
 KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,  
 MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,  
 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,  
 VN, YU, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:  
 US 1999-396813 A3 19990914 <--  
 US 2002-197000 A2 20020717 <--  
 US 2002-245871 A2 20020917 <--  
 US 2005-33039 A 20050111

AB Disclosed is an antigen presentation enhancing hybrid polypeptide which includes three elements. The first element is an N-terminal element consisting essentially of 4-16 residues of the mammalian Ii-Key peptide LRMKLPKPPKPVSKMR and non-N-terminal deletion modifications thereof that retain antigen presentation enhancing activity. The second element is a chemical structure covalently linking the N-terminal element described above to the MHC Class II-presented epitope described below. The chemical structure is a covalently joined group of atoms which when arranged in a linear fashion forms a flexible chain which extends up to the length of 20 amino acids likewise arranged in a linear fashion, the chemical structure being selected from the group consisting of: (i) immunol. neutral chemical structures, (ii) a MHC Class I epitope or a portion thereof, and/or (iii) an antibody-recognized determinant or a portion thereof. Finally, the enhancing antigen presentation enhancing hybrid polypeptide includes a C-terminal element comprising an antigenic epitope in the form of a polypeptide or peptidomimetic structure which binds to the antigenic peptide binding site of an MHC class II mol. Methods for the design and testing of these peptides are presented. Provided are protein and nucleic acid sequences for antigens and peptides of the invention. Exemplified proteins are allergen: Ara h 1-3, Fel d 1, Phi p 1, Phl p 5a, Bla q 5, and bee venom phospholipase A2; tumor antigens: CEA, CA-125, PSA, gp100, Pmel17, TRP-2, melanoma tyrosinase, MART-1, and Her-2 neu; pathogenic antigens: anthrax toxin lethal factor, anthrax protective antigen, Variola virus B5R protein, Ebola virus membrane-associated protein VP24, SARS proteins, influenza virus proteins; and autoantigens: myelin basic protein, proteolipid protein, and myelin-oligodendrocyte glycoprotein precursor. Demonstrated are diagnosis and treatment of the early autoimmune phase leading to type I diabetes mellitus.

INCL 424185100; 435069100; 435320100; 435325000; 530350000; 536023500

CC 15-2 (Immunochemistry)  
 Section cross-reference(s): 63

IT Skin

(dander; hybrid peptides comprising Ii-Key peptide and antigenic epitope as vaccines against infection, allergy and cancer)

IT 676141-12-1 676141-13-2 676141-14-3 676141-15-4 676141-16-5  
 676141-17-6 676141-18-7 676141-19-8 676141-20-1 676141-21-2  
 676141-22-3 676141-23-4 676141-24-5 676141-25-6 676141-26-7  
 676141-27-8 676141-28-9 676141-29-0 676141-30-3 676141-31-4  
 676141-32-5 676141-33-6 676141-34-7 676141-35-8 676141-36-9  
 676141-37-0 676141-39-2 676141-40-5 676141-41-6 676141-42-7  
 676141-43-8 676141-44-9 676141-45-0 676141-46-1 676141-47-2  
 676141-48-3 676141-49-4 676141-50-7 676141-51-8 676141-52-9

676141-53-0	676141-54-1	676141-55-2	676141-56-3	676141-57-4
676141-58-5	676141-59-6	676141-60-9	676141-61-0	676141-62-1
676141-63-2	676141-64-3	676141-65-4	676141-66-5	676141-67-6
676141-68-7	676141-69-8	676141-70-1	676141-71-2	676141-72-3
676141-73-4	676141-74-5	676141-75-6	676141-76-7	
676141-77-8	676141-78-9	676141-79-0	676141-80-3	676141-81-4
676141-82-5	676141-83-6	676141-84-7	676141-85-8	676141-86-9
676141-87-0	676141-88-1	676141-89-2	676141-90-5	676141-91-6
676141-92-7	676141-93-8	676141-94-9	676141-95-0	676141-96-1
676141-98-3	676141-99-4	676142-00-0	676142-01-1	676142-02-2
676142-03-3	676142-04-4	676142-05-5	676142-06-6	676142-07-7
676142-08-8	676142-09-9	676142-10-2	676142-11-3	676142-13-5
676142-14-6	676142-15-7	676142-16-8	676142-17-9	676142-18-0
676142-19-1	676142-20-4	676142-21-5	676142-22-6	676142-23-7
676142-24-8	676142-25-9	676142-26-0	676142-27-1	676142-28-2
676142-29-3	676142-30-6	676142-31-7	676142-32-8	676142-33-9
676142-35-1	676142-36-2	676142-37-3	676142-38-4	676142-39-5
676142-40-8	676142-41-9	676142-42-0	676142-43-1	676142-44-2
676142-45-3	676142-46-4	676142-47-5	676142-48-6	676142-49-7
676142-50-0	676142-51-1	676142-52-2	676142-53-3	676142-54-4
676142-55-5	676142-56-6	676142-58-8	676142-59-9	676142-61-3
676142-62-4	676142-63-5	676142-64-6	676142-65-7	676142-66-8
676142-67-9	676142-68-0	676142-69-1	676142-70-4	676142-71-5
676142-72-6	676142-73-7	676142-74-8	676142-75-9	676142-76-0
676142-77-1	676142-78-2	676142-79-3	676142-80-6	676142-81-7
676142-82-8	676142-83-9	676142-84-0	676142-85-1	676142-86-2
676142-87-3	676142-88-4	676142-89-5	676142-90-8	676142-91-9
676142-92-0	676142-93-1	676142-94-2	676142-95-3	676142-96-4
676142-97-5	676142-98-6	676143-00-3	676143-01-4	676143-02-5
676143-03-6	676143-04-7	676143-05-8	676143-06-9	676143-07-0
676143-09-2	676143-10-5	676143-11-6	676143-12-7	676143-13-8
676143-14-9	676143-15-0	676143-16-1	676143-17-2	676143-19-4
676143-20-7	676143-21-8	676143-22-9	676143-23-0	676143-24-1
676143-25-2	676143-26-3	676143-27-4	676143-29-6	676143-30-9
676143-31-0	676143-32-1	676143-33-2	676143-34-3	676143-35-4
676143-39-8	676143-41-2	676143-43-4	676143-44-5	676143-45-6
676143-46-7	676143-47-8	676143-48-9	676143-49-0	676143-50-3
676143-51-4	676143-52-5	676143-53-6	676143-54-7	676143-55-8
676143-56-9	676143-57-0	676143-58-1	676143-59-2	676143-60-5
676143-61-6	676143-62-7	676143-63-8	676143-64-9	676143-65-0

RL: PRP (Properties)

(unclaimed protein sequence; hybrid peptides comprising Ii-Key peptide and antigenic epitope as vaccines against infection, allergy and cancer)

IT 676141-74-5

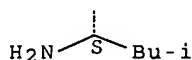
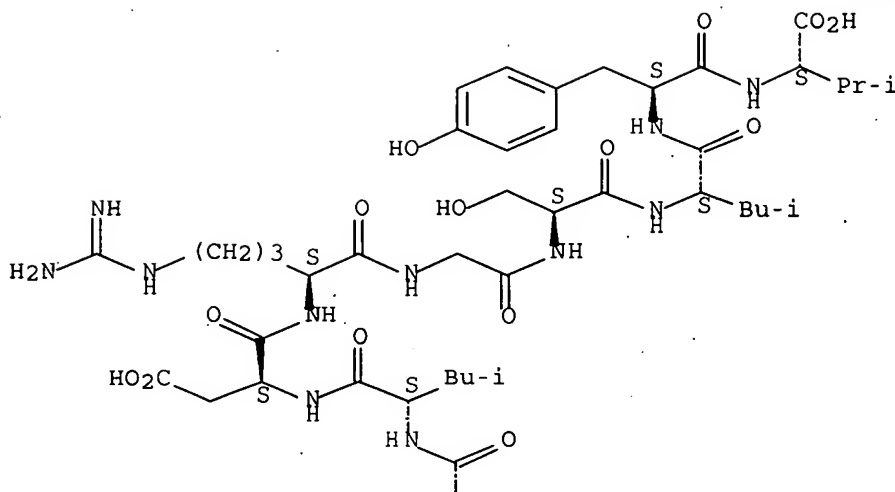
RL: PRP (Properties)

(unclaimed protein sequence; hybrid peptides comprising Ii-Key peptide and antigenic epitope as vaccines against infection, allergy and cancer)

RN 676141-74-5 ZCAPLUS

CN L-Valine, L-leucyl-L-leucyl-L- $\alpha$ -aspartyl-L-arginylglycyl-L-seryl-L-leucyl-L-tyrosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 13 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:422135 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 143:133673  
 TITLE: Determination of Sequence-Specific Intrinsic Size  
 Parameters from Cross Sections for 162 Tripeptides  
 AUTHOR(S): Hilderbrand, Amy E.; Clemmer, David E.  
 CORPORATE SOURCE: Department of Chemistry, Indiana University,  
 Bloomington, IN, 47405, USA  
 SOURCE: Journal of Physical Chemistry B (2005), 109(23),  
 11802-11809  
 CODEN: JPCBFK; ISSN: 1520-6106  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Ion mobility and mass spectrometry techniques have been used to measure cross sections for 162 tripeptide sequences (27 different sets of six sequence isomers). The isomers have the general forms ABC, ACB, BAC, BCA, CAB, and CBA (A = Asp, Glu, Gly; B = Lys, Arg, Leu; and C = Phe, Tyr, Ser). From these data, the authors have derived a set of size parameters for individual amino acids that reflect the position of the amino acid in the sequence. These sequence-specific intrinsic size parameters (SSISPs) are used to retrodict cross-section values for the 162 measured sequences and to predict cross sections for all remaining tripeptide sequences (567 different sequences) that are comprised of these residues. In several types of peptide compns., the position of the amino acid in the sequence has a significant impact on the parameter that is derived. For example, the sequence-specific intrinsic size parameter for leucine in the third position of a peptide [SSISP(Leu3)] is

.apprx.10% larger than SSISP(Leu1). On average, cross sections that are derived using SSISPs provide a better representation of the exptl. value than those derived from composition only intrinsic size parameters, derived as described previously (Valentine et al. J. Phys. Chemical 1999, 103, 1203). Finally, mol. modeling techniques are used to derive some insight into the origin of cross-section differences that arise from sequence variation.

CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 9, 22

IT 2375-01-1P 4306-24-5P 6511-06-4P 7220-68-0P 14317-87-4P  
 15373-56-5P 17608-53-6P 19459-22-4P 20274-92-4P 23642-44-6P  
 47555-33-9P 51352-43-3P 61756-27-2P 71227-74-2P 71227-79-7P  
 73205-79-5P 81858-38-0P 84888-82-4P 85046-24-8P 85530-46-7P  
 85807-00-7P 85807-17-6P 85807-36-9P 90236-06-9P 91290-35-6P  
 93993-14-7P 96849-31-9P 97812-04-9P 99092-26-9P 100029-32-1P  
 102466-35-3P 103213-38-3P 106111-04-0P 106326-39-0P 106326-62-9P  
 106326-66-3P 106326-86-7P 106881-05-4P 110503-90-7P 111245-28-4P  
 111790-77-3P 115633-60-8P 115945-15-8P 116614-24-5P 116685-23-5P  
 120256-26-0P 121822-47-7P 122061-62-5P 122628-73-3P 125551-90-8P  
 125551-93-1P 127103-05-3P 130022-72-9P 130535-16-9P 130535-17-0P  
 130535-18-1P 130535-19-2P 130535-20-5P 130535-21-6P 130535-22-7P  
 130535-23-8P 130535-24-9P 130535-25-0P 133706-67-9P 134580-61-3P  
 140716-04-7P 153150-94-8P 158734-09-9P 159554-22-0P  
 160541-27-5P 163404-42-0P 172615-84-8P 175175-47-0P 175175-49-2P  
 175175-62-9P 175175-68-5P 175176-44-0P 175176-78-0P 175176-82-6P  
 175177-11-4P 175177-13-6P 175177-15-8P 175177-80-7P 175177-81-8P  
 179244-06-5P 179244-10-1P 188297-93-0P 199931-80-1P 201463-77-6P  
 204644-05-3P 204644-07-5P 204644-11-1P 204644-12-2P 204644-19-9P  
 204644-22-4P 204644-31-5P 204644-33-7P 204924-15-2P 219589-28-3P  
 263159-13-3P 298184-94-8P 321875-08-5P 327989-78-6P 349493-92-1P  
 396078-67-4P 403703-63-9P 403703-65-1P 403703-77-5P 403703-84-4P  
 408523-71-7P 457661-68-6P 457661-69-7P 500725-00-8P 502494-76-0P  
 506435-13-8P 577742-98-4P 577743-01-2P 586946-59-0P 596792-78-8P  
 741267-33-4P 803706-09-4P 858365-19-2P 858365-20-5P 858365-21-6P  
 858365-22-7P 858365-23-8P 858365-27-2P 858365-28-3P 858365-29-4P  
 858365-30-7P 858365-31-8P 858365-32-9P 858365-34-1P 858365-35-2P  
 858365-36-3P 858365-37-4P 858365-38-5P 858365-39-6P 858365-41-0P  
 858365-42-1P 858365-43-2P 858365-44-3P 858365-45-4P 858365-46-5P  
 858365-47-6P 858365-48-7P 858365-49-8P 858365-50-1P 858365-51-2P  
 858365-52-3P 858365-53-4P 858365-54-5P 858365-55-6P 858365-56-7P  
 858365-57-8P 858365-58-9P 858365-59-0P 858365-60-3P 858365-61-4P  
 858365-62-5P 858365-63-6P 858365-64-7P

RL: CPN (Combinatorial preparation); PRP (Properties); CMBI (Combinatorial study); PREP (Preparation)

(solid-phase combinatorial synthesis and ion mobility/MS measurements of cross sections of 162 tripeptides for determining sequence-specific intrinsic size parameters)

IT 158734-09-9P

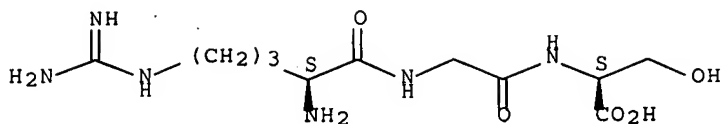
RL: CPN (Combinatorial preparation); PRP (Properties); CMBI (Combinatorial study); PREP (Preparation)

(solid-phase combinatorial synthesis and ion mobility/MS measurements of cross sections of 162 tripeptides for determining sequence-specific intrinsic size parameters)

RN 158734-09-9 ZCAPLUS

CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 14 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:259357 ZCAPLUS Full-text

DOCUMENT NUMBER: 142:334946

TITLE: Recombinant allergens with mutated IgE epitopes for treating anaphylaxis induced by food, venom, drug and latex allergens

INVENTOR(S): Caplan, Michael J.; Bottomly, Kim H.; Sosin, Howard B.; Burks, A. Wesley; Sampson, Hugh A.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 117 pp., Cont.-in-part of U.S. Ser. No. 100,303.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 14

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005063994	A1	20050324	US 2004-899551	20040726 <--
US 2003035810	A1	20030220	US 2000-731375	20001206 <--
AT 319475	T	20060315	AT 2000-982485	20001206 <--
ES 2260078	T3	20061101	ES 2000-982485	20001206 <--
AU 765211	B2	20030911	AU 2001-43769	20010508 <--
US 2003202980	A1	20031030	US 2002-100303	20020318 <--
US 2004208894	A1	20041021	US 2003-728323	20031204 <--
US 2004234548	A1	20041125	US 2003-728051	20031204 <--
PRIORITY APPLN. INFO.:			US 2000-195035P	P 20000406 <--
			US 2000-731375	A2 20001206 <--
			US 2002-100303	A2 20020318 <--
			US 1995-9455P	P 19951229 <--
			AU 1996-72433	A3 19960923 <--
			US 1996-717933	B1 19960923 <--
			US 1998-73283P	P 19980131 <--
			US 1998-74590P	P 19980213 <--
			US 1998-74624P	P 19980213 <--
			US 1998-74633P	P 19980213 <--
			US 1998-106872	A2 19980629 <--
			US 1998-141220	A2 19980827 <--
			US 1998-191593	A2 19981113 <--
			US 1999-240557	B2 19990129 <--
			US 1999-241101	B2 19990129 <--
			US 1999-248673	B2 19990211 <--
			US 1999-248674	B2 19990211 <--
			US 1999-122450P	P 19990302 <--
			US 1999-122452P	P 19990302 <--
			US 1999-122560P	P 19990302 <--
			US 1999-122565P	P 19990302 <--
			US 1999-122566P	P 19990302 <--



US 1999-267719 B2 19990311 <--  
 US 2000-494096 A2 20000128 <--  
 US 2001-276822P P 20010316 <--

AB The present invention provides methods and compns. for treating or preventing allergic reactions, particularly anaphylactic reactions. Methods of the present invention involve administering microorganisms to allergic subjects, where the microorganisms contain a recombinant version of the protein allergen. The recombinant version can be wild-type or may include mutations within IgE epitopes of the protein allergen. Preferably the compns. are administered rectally. Particularly preferred microorganisms are bacteria such as E. coli. Any allergen may be used in the inventive methods. Particularly preferred allergens are anaphylactic allergens including protein allergens found in foods, venoms, drugs and latex. The inventive compns. and methods are demonstrated in the treatment of peanut-induced anaphylaxis.

IC ICM A61K039-02

INCL 424200100

CC 15-8 (Immunochemistry)

Section cross-reference(s): 3, 63

IT Skin

(test; recombinant allergens with mutated IgE epitopes for treating anaphylaxis induced by food, venom, drug and latex allergens)

IT 64134-30-1 191857-51-9 245445-88-9 253127-93-4 848652-28-8

848652-29-9 848652-30-2 848652-32-4 848652-33-5 848652-34-6

RL: PRP (Properties)

(unclaimed sequence; recombinant allergens with mutated IgE epitopes for treating anaphylaxis induced by food, venom, drug and latex allergens)

IT 848652-28-8

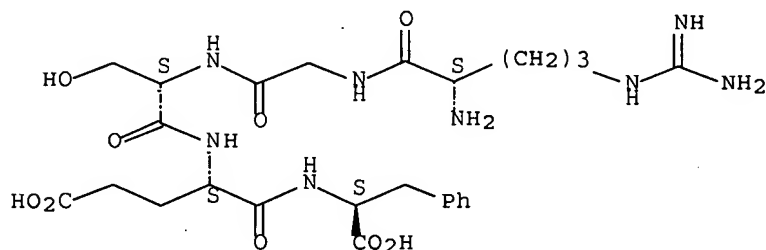
RL: PRP (Properties)

(unclaimed sequence; recombinant allergens with mutated IgE epitopes for treating anaphylaxis induced by food, venom, drug and latex allergens)

RN 848652-28-8 ZCAPLUS

CN L-Phenylalanine, L-arginylglycyl-L-seryl-L- $\alpha$ -glutamyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 15 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:160813 ZCAPLUS Full-text

DOCUMENT NUMBER: 142:254654

TITLE: Uses of VEGF traps made from Ig domains of VEGF receptors 1, 2 and 3 in treating ocular disease

INVENTOR(S): Daly, Thomas J.; Fandl, James P.; Papadopoulos, Nicholas J.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U.S.  
 Ser. No. 609,775.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 10  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005043236	A1	20050224	US 2004-880021	20040629
US 2004014667	A1	20040122	US 2003-609775	20030630 <--
US 7087411	B2	20060808		
US 2006058234	A1	20060316	US 2005-204709	20050816 <--
US 2006030529	A1	20060209	US 2005-218234	20050901 <--
US 2006148705	A1	20060706	US 2006-346008	20060202
PRIORITY APPLN. INFO.:			US 2003-609775	A2 20030630
			US 1999-138133P	P 19990608 <--
			WO 2000-US14142	W 20000523 <--
			US 2001-9852	A2 20011206 <--
			US 2004-880021	A2 20040629
			US 2004-988243	A2 20041112
			US 2004-16097	A2 20041217
			US 2004-16503	A2 20041217
			US 2005-89803	A2 20050325

AB Nucleic acid mols. and multimeric proteins capable of binding vascular endothelial growth factor (VEGF) are provided. The VEGF receptor components of the VEGF mini trap consist of the Ig domain 2 of Flt-1 (Flt1D2) (R1), the Ig domain 3 of Flk-1 (Flk1D3) (R2) (together, R1R2), and/or R1 and Ig domain 3 of Flt-4 (Flt1D3) (R3) (together, R1R3). The protein sequences of three VEGF traps are provided. VEGF traps are disclosed which are therapeutically useful for treating VEGF-associated conditions and diseases, such as ocular disease, and are specifically designed for local administration to specific organs, tissues, and/or cells.

IC ICM A61K038-17

ICS C07H021-04; C07K014-71

INCL 514012000; 530350000; 536023500; 435069100; 435320100; 435325000

CC 1-12 (Pharmacology)

Section cross-reference(s): 2, 3

IT 158734-08-8 644994-65-0

RL: PRP (Properties)

(unclaimed sequence; uses of VEGF traps made from Ig domains of VEGF receptors 1, 2 and 3 in treating ocular disease)

IT 158734-08-8

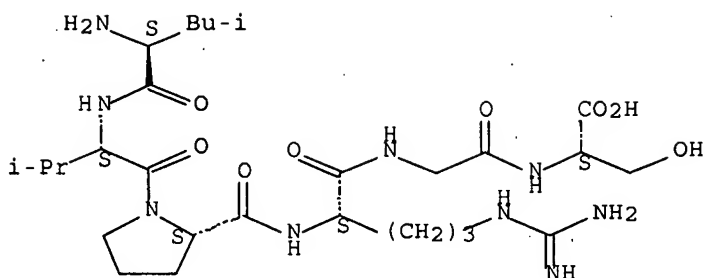
RL: PRP (Properties)

(unclaimed sequence; uses of VEGF traps made from Ig domains of VEGF receptors 1, 2 and 3 in treating ocular disease)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 16 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:252189 ZCAPLUS Full-text

DOCUMENT NUMBER: 140:286142

TITLE: Hybrid polypeptides comprising Ii-key motif and MHC class I or II-presented epitope of antigen, allergen or tumor antigen as vaccines against infection, allergy and cancer

INVENTOR(S): Humphreys, Robert E.; Xu, Minzhen

PATENT ASSIGNEE(S): Antigen Express, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 90 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004058881	A1	20040325	US 2002-253286	20020924 <--
US 7179645	B2	20070220		
CA 2499123	A1	20040415	CA 2003-2499123	20030912 <--
WO 2004030616	A2	20040415	WO 2003-US28574	20030912 <--
WO 2004030616	A3	20041007		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003294220	A1	20040423	AU 2003-294220	20030912 <--
EP 1556072	A2	20050727	EP 2003-789700	20030912 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006515744	T	20060608	JP 2004-541534	20030912 <--
PRIORITY APPLN. INFO.:				
			US 2002-245871	A 20020917 <--
			US 2002-253286	A 20020924 <--
			WO 2003-US28574	W 20030912

AB Disclosed is a nucleic acid mol. comprising a first expressible sequence encoding a protein of interest or polypeptide of interest which contains an MHC Class II-presented epitope. In addition, the nucleic acid mol. comprises a second expressible nucleic acid sequence encoding an antigen presentation-

enhancing hybrid polypeptide. The antigen presentation enhancing hybrid polypeptide includes the following elements: (i) an N-terminal element consisting essentially of 4-16 residues of the mammalian Ii-Key peptide: LRMKLPKPPKPVSKMR and non-N-terminal deletion modifications thereof that retain antigen presentation enhancing activity; (ii) a C-terminal element comprising an MHC Class II-presented epitope in the form of a polypeptide or peptidomimetic structure which binds to the antigenic peptide binding site of an MHC class II mol., the MHC Class II-presented epitope being contained in the protein of interest of step (a); and (iii) an intervening peptidyl structure linking the N-terminal and C-terminal elements of the hybrid, the peptidyl structure having a length of about 20 amino acids or less. Exemplified proteins are allergen: Ara h 1-3, Fel d 1, Phi p 1, Phl p 5a, Bla q 5, and bee venom phospholipase A2; tumor antigen: CEA, CA-125, PSA, gp100, Pmel17, TRP-2, melanoma tyrosinase, MART-1, and Her-2 neu; pathogenic antigen: anthrax toxin lethal factor, anthrax protective antigen, Variola virus B5R protein, and Ebola virus membrane-associated protein VP24; and autoantigen: myelin basic protein, proteolipid protein, and myelin-oligodendrocyte glycoprotein precursor.

IC ICM A61K048-00

ICS C12Q001-68; C07H021-04; C07K014-74

INCL 514044000; 530350000; 435006000; 435069100; 435320100; 435325000; 536023500

CC 15-2 (Immunochemistry)

Section cross-reference(s): 3, 63

IT Skin

(dander; hybrid polypeptides comprising Ii-key motif and MHC class I or II-presented epitope of antigen, allergen or tumor antigen as vaccines against infection, allergy and cancer)

IT	676119-75-8D, chimeric derivs.	676119-76-9D, chimeric derivs.
	676119-77-0D, chimeric derivs.	676119-78-1D, chimeric derivs.
	676119-79-2D, chimeric derivs.	676119-80-5D, chimeric derivs.
	676119-81-6D, chimeric derivs.	676119-82-7D, chimeric derivs.
	676119-83-8D, chimeric derivs.	676119-84-9D, chimeric derivs.
	676119-85-0D, chimeric derivs.	676119-86-1D, chimeric derivs.
	676140-82-2D, chimeric derivs.	676140-83-3D, chimeric derivs.
	676140-84-4D, chimeric derivs.	676140-85-5D, chimeric derivs.
	676140-86-6D, chimeric derivs.	676140-87-7D, chimeric derivs.
	676140-88-8D, chimeric derivs.	676140-89-9D, chimeric derivs.
	676140-90-2D, chimeric derivs.	676140-91-3D, chimeric derivs.
	676140-92-4D, chimeric derivs.	676140-93-5D, chimeric derivs.
	676140-94-6D, chimeric derivs.	676140-95-7D, chimeric derivs.
	676140-96-8D, chimeric derivs.	676140-97-9D, chimeric derivs.
	676140-98-0D, chimeric derivs.	676140-99-1D, chimeric derivs.
	676141-00-7D, chimeric derivs.	676141-01-8D, chimeric derivs.
	676141-02-9D, chimeric derivs.	676141-03-0D, chimeric derivs.
	676141-04-1D, chimeric derivs.	676141-05-2D, chimeric derivs.
	676141-06-3D, chimeric derivs.	676141-07-4D, chimeric derivs.
	676141-08-5D, chimeric derivs.	676141-09-6D, chimeric derivs.
	676141-10-9D, chimeric derivs.	676141-11-0D, chimeric derivs.
	676141-12-1D, chimeric derivs.	676141-13-2D, chimeric derivs.
	676141-14-3D, chimeric derivs.	676141-15-4D, chimeric derivs.
	676141-16-5D, chimeric derivs.	676141-17-6D, chimeric derivs.
	676141-18-7D, chimeric derivs.	676141-19-8D, chimeric derivs.
	676141-20-1D, chimeric derivs.	676141-21-2D, chimeric derivs.
	676141-22-3D, chimeric derivs.	676141-23-4D, chimeric derivs.
	676141-24-5D, chimeric derivs.	676141-25-6D, chimeric derivs.
	676141-26-7D, chimeric derivs.	676141-27-8D, chimeric derivs.
	676141-28-9D, chimeric derivs.	676141-29-0D, chimeric derivs.
	676141-30-3D, chimeric derivs.	676141-31-4D, chimeric derivs.
	676141-32-5D, chimeric derivs.	676141-33-6D, chimeric derivs.

[illegible]

676142-55-5D, chimeric derivs.	676142-56-6D, chimeric derivs.
676142-57-7D, chimeric derivs.	676142-58-8D, chimeric derivs.
676142-59-9D, chimeric derivs.	676142-60-2D, chimeric derivs.
676142-61-3D, chimeric derivs.	676142-62-4D, chimeric derivs.
676142-63-5D, chimeric derivs.	676142-64-6D, chimeric derivs.
676142-65-7D, chimeric derivs.	676142-66-8D, chimeric derivs.
676142-67-9D, chimeric derivs.	676142-68-0D, chimeric derivs.
676142-69-1D, chimeric derivs.	676142-70-4D, chimeric derivs.
676142-71-5D, chimeric derivs.	676142-72-6D, chimeric derivs.
676142-73-7D, chimeric derivs.	676142-74-8D, chimeric derivs.
676142-75-9D, chimeric derivs.	676142-76-0D, chimeric derivs.
676142-77-1D, chimeric derivs.	676142-78-2D, chimeric derivs.
676142-79-3D, chimeric derivs.	676142-80-6D, chimeric derivs.
676142-81-7D, chimeric derivs.	676142-82-8D, chimeric derivs.
676142-83-9D, chimeric derivs.	676142-84-0D, chimeric derivs.
676142-85-1D, chimeric derivs.	676142-86-2D, chimeric derivs.
676142-87-3D, chimeric derivs.	676142-88-4D, chimeric derivs.
676142-89-5D, chimeric derivs.	676142-90-8D, chimeric derivs.
676142-91-9D, chimeric derivs.	676142-92-0D, chimeric derivs.
676142-93-1D, chimeric derivs.	676142-94-2D, chimeric derivs.
676142-95-3D, chimeric derivs.	676142-96-4D, chimeric derivs.
676142-97-5D, chimeric derivs.	676142-98-6D, chimeric derivs.
676142-99-7D, chimeric derivs.	676143-00-3D, chimeric derivs.
676143-01-4D, chimeric derivs.	676143-02-5D, chimeric derivs.
676143-03-6D, chimeric derivs.	676143-04-7D, chimeric derivs.
676143-05-8D, chimeric derivs.	

RL: BSU (Biological study, unclassified); PRP (Properties); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)

(hybrid polypeptides comprising Ii-key motif and MHC class I or  
II-presented epitope of antigen, allergen or tumor antigen as vaccines  
against infection, allergy and cancer)

IT 676141-74-5D, chimeric derivs.

RL: BSU (Biological study, unclassified); PRP (Properties); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)

(hybrid polypeptides comprising Ii-key motif and MHC class I or  
II-presented epitope of antigen, allergen or tumor antigen as vaccines  
against infection, allergy and cancer)

RN 676141-74-5 ZCAPLUS

CN L-Valine, L-leucyl-L-leucyl-L- $\alpha$ -aspartyl-L-arginylglycyl-L-seryl-L-  
leucyl-L-tyrosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L95 ANSWER 17 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2004:219828 ZCAPLUS Full-text  
DOCUMENT NUMBER: 140:249007  
TITLE: Methods for preparing abrogen fusion proteins for  
inhibition of angiogenesis-related disorders  
INVENTOR(S): Nesbit, Mark; Cameron, Beatrice; Blanche, Francis  
PATENT ASSIGNEE(S): Fr.  
SOURCE: U.S. Pat. Appl. Publ., 88 pp., Cont.-in-part of U.S.  
Ser. No. 233,675.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004052810	A1	20040318	US 2003-424999	20030429 <--
WO 2003042354	A2	20030522	WO 2002-US27885	20020904 <--
WO 2003042354	A3	20060105		

W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,
	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,

US, UZ, VN, YU, ZA, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003228298 A1 20031211 US 2002-233675 20020904 <--  
 PRIORITY APPLN. INFO.: US 2002-233675 A2 20020904 <--  
 WO 2002-US27885 A 20020904 <--  
 US 2001-316300P P 20010904 <--

AB The present invention provides methods for preparing abrogen fusion proteins for inhibition of angiogenesis-related disorders. Abrogen activity includes region of urokinase plasminogen activator comprising kringle domain. In preferred embodiments, fusion proteins containing abrogen and immunoglobulin IgG-2a and human serum albumin were prepared. Polypeptides according to the present invention are useful for developing cell growth-modulating compns. and methods and for treating and/or preventing cancer, tumor growth, or other angiogenic dependent or angiogenesis associated diseases.

IC ICM A61K048-00

ICS A61K039-00; C07K014-47

INCL 424185100; X51-4 1.2; X51-4 4.4; X53-035.0

CC 6-3 (General Biochemistry)

Section cross-reference(s): 1, 3

IT 122024-47-9 147395-23-1 158734-08-8 205938-74-5  
 532384-53-5 671184-41-1 671184-42-2 671184-43-3

RL: PRP (Properties)

(unclaimed sequence; methods for preparing abrogen fusion proteins for inhibition of angiogenesis-related disorders)

IT 158734-08-8

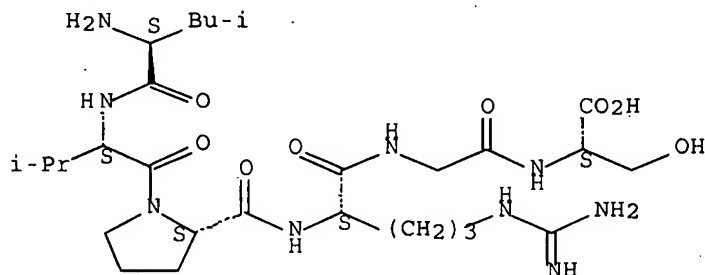
RL: PRP (Properties)

(unclaimed sequence; methods for preparing abrogen fusion proteins for inhibition of angiogenesis-related disorders)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 18 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:219823 ZCAPLUS Full-text

DOCUMENT NUMBER: 140:249006

TITLE: Methods for preparing kringle domain-containing fusion proteins for inhibition of angiogenesis-related disorders

INVENTOR(S): Nesbit, Mark; Cameron, Beatrice; Blanche, Francis

PATENT ASSIGNEE(S): Fr.

SOURCE: U.S. Pat. Appl. Publ., 108 pp., Cont.-in-part of U.S.



Pat. Appl. 2003 228,298.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004052777	A1	20040318	US 2003-425000	20030429 <--
WO 2003042354	A2	20030522	WO 2002-US27885	20020904 <--
WO 2003042354	A3	20060105		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003228298	A1	20031211	US 2002-233675	20020904 <--
---------------	----	----------	----------------	--------------

PRIORITY APPLN. INFO.:

US 2002-233675	A2	20020904 <--
----------------	----	--------------

WO 2002-US27885	A	20020904 <--
-----------------	---	--------------

US 2001-316300P	P	20010904 <--
-----------------	---	--------------

AB The present invention relates to kringle polypeptides and polynucleotides encoding kringle polypeptides and their use as therapeutic agents and in methods of identifying agonist compds. In effect, the kringle polypeptides according to the present invention are particularly useful for inhibiting in vitro and in vivo proliferation, migration and/or invasion of endothelial cells, recruitment of smooth muscle cells, and/or the formation of vasculature in a tissue. The present invention also relates to the use of kringle polypeptides for treating and/or preventing angiogenesis in tumors and inhibiting the growth of tumors. The present invention further relates to a method of modulating angiogenesis in cells affected by an angiogenic-dependent process and inhibiting unwanted or unregulated angiogenesis in an angiogenesis-associated disease. The present invention also concerns a method of production and purification of kringle polypeptides in a soluble and active form.

IC ICM A61K038-43

ICS C12N009-99; A61K039-00; C07K014-54

INCL 424094100; 435184000; 424185100; 530351000

CC 6-3 (General Biochemistry)

Section cross-reference(s): 1, 3

IT 147395-23-1 158734-08-8 205938-74-5 671184-41-1

671184-42-2 671184-43-3

RL: PRP (Properties)

(unclaimed sequence; methods for preparing kringle domain-containing fusion proteins for inhibition of angiogenesis-related disorders)

IT 158734-08-8

RL: PRP (Properties)

(unclaimed sequence; methods for preparing kringle domain-containing fusion proteins for inhibition of angiogenesis-related disorders)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



JP 2005533855	T	20051110	JP 2004-523778	20030724
US 2007134262	A1	20070614	US 2004-512790	20041027
PRIORITY APPLN. INFO.:			AT 2002-1124	A 20020724
			EP 2003-450171	A 20030711
			WO 2003-EP8112	W 20030724

AB It is an object of the present invention to provide means for replacing or improving existing or proposed vaccines against viral pathogens, especially human pathogens. A specific aim is to provide effective T cell epitopes against viral pathogens. The invention discloses polypeptides encoded by an alternative reading frame (non-coding open-reading frame (ncORF)) of a pathogenic virus, which polypeptides - start with a methionine amino acid residue, -- comprise an antigenic determinant (epitope) and - comprise more than 7 amino acid residues and fragments of said polypeptides comprising more than 7 amino acids. T cell responses against alternatively encoded epitopes are detectable in patients suffering such infections. Such a polypeptide according to the present invention may be defined as an antigenic sequence outside the primarily (main) transcribed ORF of a given pathogenic virus. Alternatively encoded antigens from hepatitis C virus and human immunodeficiency virus are provided. Possible ncORF epitopes with superior immunization properties were identified for hepatitis C virus (HCV), human immunodeficiency virus (HIV) and human papilloma virus (HPV). The immunogenicity of HCV ncORF peptides was demonstrated on HLA-A-allele-transgenic mice and on HCV patient -derived cells.

IC ICM C12N015-33  
ICS C07K014-005; C07K014-18; A61K039-12  
CC 15-2 (Immunochemistry)  
Section cross-reference(s): 3, 10

L95 ANSWER 20 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:80402 ZCAPLUS Full-text  
DOCUMENT NUMBER: 140:158618  
TITLE: cDNA and polypeptide sequences for human gene 213P1F11, and diagnostic and therapeutic uses for bladder, prostate, or breast cancer  
INVENTOR(S): Challita-Eid, Pia M.; Raitano, Arthur B.; Faris, Mary; Hubert, Rene S.; Morrison, Robert Kendall; Ge, Wangmao; Jakobovits, Aya  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 334 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004019915	A1	20040129	US 2002-114432	20020401 <--
US 2007037745	A1	20070215	US 2005-90545	20050325 <--
PRIORITY APPLN. INFO.:			US 2002-114432	A3 20020401 <--

AB The invention claims a gene (designated 213P1F11) and its encoded protein, and variants thereof, wherein 213P1F11 exhibits tissue specific expression in normal adult tissue, and is aberrantly expressed in bladder, breast, and prostate cancers. Consequently, 213P1F11 provides a diagnostic, prognostic, prophylactic and/or therapeutic target for cancer. The 213P1F11 gene or fragment thereof, or its encoded protein, or variants thereof, or a fragment thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with 213P1F11 can be used in active or passive immunization. The invention provide sequences for 10 cDNA isoforms and 6 protein isoforms of gene 213p1F11. Variants 213P1F11 v.2 and v.3 are splice

variants, 213P1F11 v.4 is an alternative transcript, and variants v.5-v.10 are single nucleotide polymorphisms. Amino acid sequences of 213P1F11 v.1, v.2, v.3, and v.4 are homologous to human and mouse caspase 14 precursor. Gene 213P1F11 mRNAs are highly expressed in bladder, breast, and prostate cancer tissues. In normal tissue, 213P1F11 mRNA was only detected in skin and thymus. The gene was mapped to human chromosome 19 at 19p13.1. [This abstract record is one of several records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IC ICM A01K067-027

ICS A61K039-395; C12N005-06; C07K016-40

INCL 800006000; 424146100; 530388260; 435338000

CC 3-3 (Biochemical Genetics)

Section cross-reference(s): 1, 7, 13, 14, 15

IT Skin

Thymus gland

(gene 213P1F11 mRNA; cDNA and polypeptide sequences for human gene 213P1F11, and diagnostic and therapeutic uses for cancer)

IT	371761-20-5	546128-98-7	651770-17-1	651770-18-2	651770-19-3
	651770-20-6	651770-21-7	651770-22-8	651770-23-9	651770-24-0
	651770-25-1	651770-26-2	651770-27-3	651770-28-4	651770-29-5
	651770-30-8	651770-31-9	651770-32-0	651770-33-1	651770-34-2
	651770-35-3	651770-36-4	651770-37-5	651770-38-6	651770-39-7
	651770-40-0	651770-41-1	651770-42-2	651770-43-3	651770-44-4
	651770-45-5	651770-46-6	651770-47-7	651770-48-8	651770-49-9
	651770-50-2	651770-51-3	651770-52-4	651770-53-5	651770-54-6
	651770-55-7	651770-56-8	651770-57-9	651770-58-0	651770-59-1
	651770-60-4	651770-61-5	651770-62-6	651770-63-7	651770-64-8
	651770-65-9	651770-66-0	651770-67-1	651770-68-2	651770-69-3
	651770-70-6	651770-71-7	651770-72-8	651770-73-9	651770-74-0
	651770-75-1	651770-76-2	651770-77-3	651770-78-4	651770-79-5
	651770-80-8	651770-81-9	651770-82-0	651770-83-1	651770-84-2
	651770-85-3	651770-86-4	651770-87-5	651770-88-6	651770-89-7
	651770-90-0	651770-91-1	651770-92-2	651770-93-3	651770-94-4
	651770-95-5	651770-98-8	651770-99-9	651771-00-5	651771-01-6
	651771-02-7	651771-03-8	651771-04-9	651771-05-0	651771-06-1
	651771-07-2	651771-08-3	651771-09-4	651771-10-7	651771-11-8
	651771-12-9	651771-13-0	651771-14-1	651771-15-2	651771-16-3
	651771-17-4	651771-18-5	651771-19-6	651771-20-9	651771-21-0
	651771-22-1	651771-23-2	651771-24-3	651771-25-4	651771-26-5
	651771-27-6	651771-28-7	651771-29-8	651771-30-1	651771-31-2
	651771-32-3	651771-33-4	651771-34-5	651771-35-6	651771-36-7
	651771-37-8	651771-38-9	651771-39-0	651771-40-3	651771-41-4
	651771-42-5	651771-43-6	651771-44-7	651771-45-8	651771-46-9
	651771-47-0	651771-48-1	651771-49-2	651771-50-5	651771-51-6
	651771-52-7	651771-53-8	651771-54-9	651771-55-0	651771-56-1
	651771-57-2	651771-58-3	651771-59-4	651771-60-7	651771-61-8
	651771-62-9	651771-63-0	651771-64-1	651771-65-2	651771-66-3
	651771-67-4	651771-68-5	651771-69-6	651771-70-9	651771-71-0
	651771-72-1	651771-73-2	651771-74-3	651771-75-4	651771-76-5
	651771-77-6	651771-78-7	651771-79-8	651771-80-1	651771-81-2
	651771-82-3	651771-83-4	651771-84-5	651771-85-6	651771-86-7
	651771-87-8	651771-88-9	651771-89-0	651771-90-3	651771-91-4
	651771-92-5	651771-93-6	651771-94-7	651771-95-8	651771-96-9
	651771-97-0	651771-98-1	651771-99-2	651772-00-8	651772-01-9
	651772-02-0	651772-03-1	651772-04-2	651772-05-3	651772-06-4
	651772-07-5	651772-08-6	651772-09-7	651772-10-0	651772-11-1
	651772-12-2	651772-13-3	651772-14-4	651772-15-5	651772-16-6
	651772-17-7	651772-18-8	651772-19-9	651772-20-2	651772-21-3
	651772-22-4	651772-23-5	651772-24-6	651772-25-7	651772-26-8

651772-27-9    651772-28-0    651772-29-1    651772-30-4    651772-31-5  
 651772-32-6    651772-33-7    651772-34-8    651772-35-9    651772-36-0  
 651772-37-1    651772-38-2    651772-39-3    651772-40-6    651772-41-7  
 651772-42-8    651772-43-9    651772-44-0    651772-45-1  
 651772-46-2    651772-47-3    651772-48-4    651772-49-5

RL: ANT (Analyte); DGN (Diagnostic use); PRP (Properties); *THU*  
 (Therapeutic use); ANST (Analytical study); BIOL (Biological study);  
 USES (Uses)

(human gene 213P1F11 peptide epitope; cDNA and polypeptide sequences  
 for human gene 213P1F11, and diagnostic and therapeutic uses for  
 cancer)

IT 651772-45-1

RL: ANT (Analyte); DGN (Diagnostic use); PRP (Properties); *THU*  
 (Therapeutic use); ANST (Analytical study); BIOL (Biological study);  
 USES (Uses)

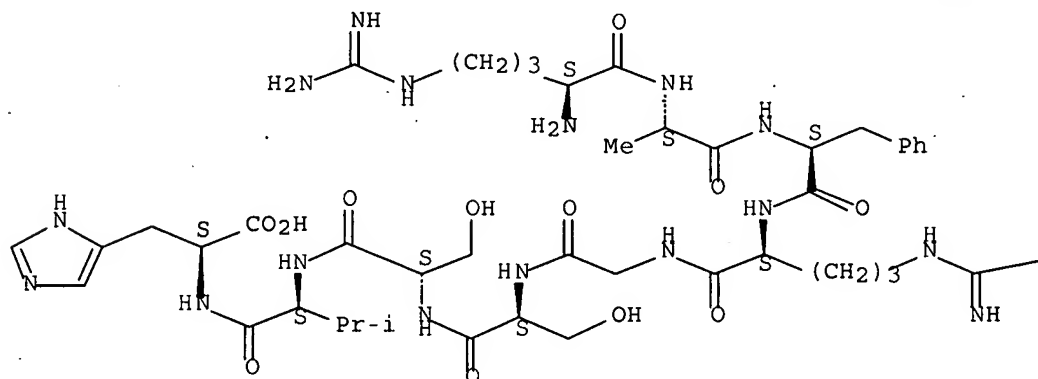
(human gene 213P1F11 peptide epitope; cDNA and polypeptide sequences  
 for human gene 213P1F11, and diagnostic and therapeutic uses for  
 cancer)

RN 651772-45-1 ZCAPLUS

CN L-Histidine, L-arginyl-L-alanyl-L-phenylalanyl-L-arginylglycyl-L-seryl-L-  
 seryl-L-valyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—NH2

ACCESSION NUMBER: 2004:60122 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 140:123179  
 TITLE: Methods for the production and therapeutic uses of VEGF traps made from Ig domains of VEGF receptors 1, 2 and 3  
 INVENTOR(S): Daly, Thomas J.; Fandl, James P.; Papadopoulos, Nicholas J.  
 PATENT ASSIGNEE(S): Regeneron Pharmaceuticals, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 28 pp., Cont.-in-part of U.S. Ser. No. 9,852.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 10  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004014667	A1	20040122	US 2003-609775	20030630 <--
US 7087411	B2	20060808		
CA 2588221	A1	20001214	CA 2000-2588221	20000523 <--
WO 2000075319	A1	20001214	WO 2000-US14142	20000523 <--
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1544299	A1	20050622	EP 2005-1328	20000523 <--
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, FI, CY			
US 7070959	B1	20060704	US 2001-9852	20011206 <--
AU 2004252175	A1	20050106	AU 2004-252175	20040629
CA 2529660	A1	20050106	CA 2004-2529660	20040629
WO 2005000895	A2	20050106	WO 2004-US21059	20040629
WO 2005000895	A3	20050915		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2005043236	A1	20050224	US 2004-880021	20040629
EP 1639007	A2	20060329	EP 2004-777335	20040629
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR			
CN 1816566	A	20060809	CN 2004-80018573	20040629
BR 2004012125	A	20060815	BR 2004-12125	20040629
US 2006058234	A1	20060316	US 2005-204709	20050816 <--
US 2006030529	A1	20060209	US 2005-218234	20050901 <--
MX 2005PA13641	A	20060224	MX 2005-PA13641	20051214
NO 2006000483	A	20060328	NO 2006-483	20060130

IN 2006CN00381	A	20070706	IN 2006-CN381	20060130
US 2006148705	A1	20060706	US 2006-346008	20060202
PRIORITY APPLN. INFO.:			US 1999-138133P	P 19990608 <--
			WO 2000-US14142	W 20000523 <--
			US 2001-9852	A2 20011206 <--
			CA 2000-2376379	A3 20000523 <--
			EP 2000-932721	A3 20000523 <--
			US 2003-609775	A 20030630
			US 2004-880021	A2 20040629
			WO 2004-US21059	W 20040629
			US 2004-988243	A2 20041112
			US 2004-16097	A2 20041217
			US 2004-16503	A2 20041217
			US 2005-89803	A2 20050325

AB Nucleic acid mols. and multimeric proteins capable of binding vascular endothelial growth factor (VEGF). VEGF mini-traps are disclosed which are therapeutically useful for treating VEGF-associated conditions and diseases, and are specifically designed for local administration to specific organs, tissues, and/or cells.

IC ICM A61K038-17  
ICS C07K014-71; C12P021-02; C12N005-06

INCL 514012000; X53-035.0; X43-5 6.97; X43-532.01; X43-532.5; X53-6 2.35

CC 2-10 (Mammalian Hormones)  
Section cross-reference(s): 3

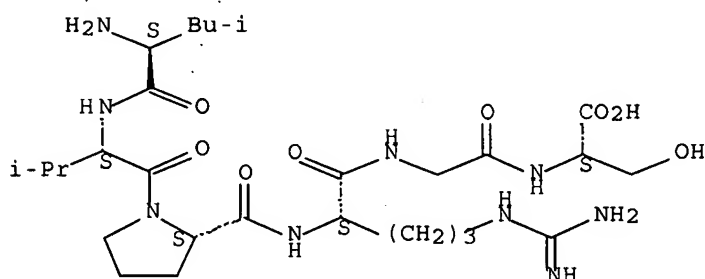
IT 158734-08-8 160597-73-9  
RL: PRP (Properties)  
(unclaimed sequence; methods for the production and therapeutic uses of VEGF traps made from Ig domains of VEGF receptors 1, 2 and 3)

IT 158734-08-8  
RL: PRP (Properties)  
(unclaimed sequence; methods for the production and therapeutic uses of VEGF traps made from Ig domains of VEGF receptors 1, 2 and 3)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 22 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:3450 ZCAPLUS [Full-text](#)

DOCUMENT NUMBER: 140:99617

TITLE: Peptide conjugates with drugs as prodrugs for activation by tissue or cell-specific proteinases

INVENTOR(S): Madison, Edwin L.; Semple, Joseph Edward; Vlasuk, George P.; Kemp, Scott Jeffrey; Komandla, Mallareddy; Siev, Daniel Vanna

PATENT ASSIGNEE(S): Corvas International, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 359 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004001801	A1	20040101	US 2002-156214	20020523 <--
PRIORITY APPLN. INFO.:			US 2002-156214	20020523 <--
OTHER SOURCE(S):	MARPAT 140:99617			

AB Conjugates of peptides with drugs that are substrates of a tissue-specific proteinases that can be used to treat diseases associated with abnormal levels of the enzyme. The enzyme may be transmembrane serine proteinase, a urokinase, or an endotheliase. The conjugates are to be substrates for proteinases that may be cell- or tissue-specific. The drug moiety of the conjugate may be cytotoxic. The drug may be bound to the peptide by a labile linker that will eliminate itself after the preliminary hydrolysis.

IC ICM A61K038-20  
 ICS A61K038-19; A61K038-18; C07K014-52; C07K014-475; C07K014-415;  
 A61K039-02

INCL 424085100; 530351000; 530370000; 530395000; 530399000; 424085200;  
 514008000; 514012000; 424236100

CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 1, 3, 7

IT Abrins  
 Anthracyclines  
 Cytokines  
 Eneidyne  
 Fas ligand  
 Growth factors, animal  
 Interleukin 1  
 Interleukin 2  
 Interleukin 6  
 Nucleic acids  
 Nucleosides, biological studies  
 Platelet-derived growth factors  
 Ricins  
 Taxanes  
 Toxins  
 Tumor necrosis factors

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (peptide conjugates, as prodrugs; peptide conjugates with drugs as  
 prodrugs for activation by tissue or cell-specific proteinases)

IT Connective tissue, disease  
 (scleroderma, CREST syndrome variant, treatment of; peptide  
 conjugates with drugs as prodrugs for activation by tissue or  
 cell-specific proteinases)

IT Autoimmune disease  
 Endocrine system, disease  
 Esophagus, neoplasm  
 Eye, disease  
 Glaucoma (disease)  
 Heart, disease  
 Infection  
 Inflammation  
 Lung, neoplasm  
 Mammary gland, neoplasm



Melanoma  
 Neoplasm  
 Ovary, neoplasm  
 Pancreas, neoplasm  
 Prostate gland, neoplasm  
 Psoriasis  
 Rheumatoid arthritis  
 Skin, disease  
 Wound

(treatment of; peptide conjugates with drugs as prodrugs for activation  
 by tissue or cell-specific proteinases)

IT	206665-17-0D, drug conjugates	476678-22-5D, drug conjugates
	476678-25-8D, drug conjugates	476679-48-8D, drug conjugates
	476681-34-2D, drug conjugates	476681-35-3D, drug conjugates
	476681-36-4D, drug conjugates	476681-37-5D, drug conjugates
	476681-38-6D, drug conjugates	476681-39-7D, drug conjugates
	476681-99-9D, drug conjugates	476682-05-0D, drug conjugates
	642482-56-2D, drug conjugates	642482-58-4D, drug conjugates
	642482-60-8D, drug conjugates	642482-61-9D, drug conjugates
	642482-62-0D, drug conjugates	642482-64-2D, drug conjugates
	642482-65-3D, drug conjugates	642482-66-4D, drug conjugates
	642482-67-5D, drug conjugates	642482-68-6D, drug conjugates
	642482-69-7D, drug conjugates	642482-70-0D, drug conjugates
	642482-71-1D, drug conjugates	642482-72-2D, drug conjugates
	642482-73-3D, drug conjugates	642482-74-4D, drug conjugates
	642482-75-5D, drug conjugates	642482-76-6D, drug conjugates
	642482-77-7D, drug conjugates	642482-78-8D, drug conjugates
	642482-79-9D, drug conjugates	642482-80-2D, drug conjugates
	642482-81-3D, drug conjugates	642482-82-4D, drug conjugates
	642482-83-5D, drug conjugates	642482-84-6D, drug conjugates
	642482-85-7D, drug conjugates	642482-86-8D, drug conjugates
	642482-87-9D, drug conjugates	642482-88-0D, drug conjugates
	642482-89-1D, drug conjugates	642482-90-4D, drug conjugates
	642482-91-5D, drug conjugates	642482-92-6D, drug conjugates
	642482-94-8D, drug conjugates	642482-95-9D, drug conjugates
	642482-96-0D, drug conjugates	642482-97-1D, drug conjugates
	642482-98-2D, drug conjugates	642482-99-3D, drug conjugates
	642483-00-9D, drug conjugates	642483-01-0D, drug conjugates
	642483-02-1D, drug conjugates	642483-03-2D, drug conjugates
	642483-04-3D, drug conjugates	642483-05-4D, drug conjugates
	642483-06-5D, drug conjugates	642483-07-6D, drug conjugates
	642483-08-7D, drug conjugates	642483-09-8D, drug conjugates
	642483-10-1D, drug conjugates	642483-11-2D, drug conjugates
	642483-12-3D, drug conjugates	642483-13-4D, drug conjugates
	642483-14-5D, drug conjugates	642483-16-7D, drug conjugates
	642483-20-3D, drug conjugates	642483-21-4D, drug conjugates
	642483-22-5D, drug conjugates	642483-23-6D, drug conjugates
	642483-24-7D, drug conjugates	642483-25-8D, drug conjugates
	642483-26-9D, drug conjugates	642483-27-0D, drug conjugates
	642483-28-1D, drug conjugates	642483-29-2D, drug conjugates
	642483-30-5D, drug conjugates	642483-31-6D, drug conjugates
	642483-32-7D, drug conjugates	642483-33-8D, drug conjugates
	642483-34-9D, drug conjugates	642483-35-0D, drug conjugates
	642483-36-1D, drug conjugates	642483-37-2D, drug conjugates
	642483-38-3D, drug conjugates	642483-39-4D, drug conjugates
	642483-40-7D, drug conjugates	642483-41-8D, drug conjugates
	642483-42-9D, drug conjugates	642483-43-0D, drug conjugates
	642483-44-1D, drug conjugates	642483-45-2D, drug conjugates
	642483-46-3D, drug conjugates	642483-47-4D, drug conjugates
	642483-48-5D, drug conjugates	642483-49-6D, drug conjugates

642483-50-9D, drug conjugates  
642483-52-1D, drug conjugates  
642483-54-3D, drug conjugates  
642483-56-5D, drug conjugates  
642483-58-7D, drug conjugates  
642483-60-1D, drug conjugates  
642483-62-3D, drug conjugates  
642483-64-5D, drug conjugates  
642483-66-7D, drug conjugates  
642483-68-9D, drug conjugates  
642483-72-5D, drug conjugates  
642483-74-7D, drug conjugates  
642483-76-9D, drug conjugates  
642483-78-1D, drug conjugates  
642483-80-5D, drug conjugates  
642483-82-7D, drug conjugates  
642483-84-9D, drug conjugates  
642483-86-1D, drug conjugates  
642483-88-3D, drug conjugates  
642483-90-7D, drug conjugates  
642483-92-9D, drug conjugates  
642483-94-1D, drug conjugates  
642483-96-3D, drug conjugates  
642483-98-5D, drug conjugates  
642484-00-2D, drug conjugates  
642484-02-4D, drug conjugates  
642484-04-6D, drug conjugates  
642484-06-8D, drug conjugates  
642484-08-0D, drug conjugates  
642484-10-4D, drug conjugates  
642484-12-6D, drug conjugates  
642484-14-8D, drug conjugates  
642484-16-0D, drug conjugates  
642484-18-2D, drug conjugates  
642484-20-6D, drug conjugates  
642484-22-8D, drug conjugates  
642484-24-0D, drug conjugates  
642484-26-2D, drug conjugates  
642484-28-4D, drug conjugates  
642484-30-8D, drug conjugates  
~~642484-32-0D, drug conjugates~~  
conjugates 642484-34-2D, drug conjugates  
conjugates 642484-36-4D, drug conjugates  
conjugates 642484-38-6D, drug conjugates  
642484-40-0D, drug conjugates  
642484-42-2D, drug conjugates  
642484-44-4D, drug conjugates  
642484-46-6D, drug conjugates  
642484-48-8D, drug conjugates  
642484-50-2D, drug conjugates  
642484-52-4D, drug conjugates  
642484-54-6D, drug conjugates  
642484-56-8D, drug conjugates  
~~642484-58-0D, drug conjugates~~  
642484-60-4D, drug conjugates  
642484-62-6D, drug conjugates  
642484-64-8D, drug conjugates  
642484-66-0D, drug conjugates  
642484-68-2D, drug conjugates  
642484-70-6D, drug conjugates  
642483-51-0D, drug conjugates  
642483-53-2D, drug conjugates  
642483-55-4D, drug conjugates  
642483-57-6D, drug conjugates  
642483-59-8D, drug conjugates  
642483-61-2D, drug conjugates  
642483-63-4D, drug conjugates  
642483-65-6D, drug conjugates  
642483-67-8D, drug conjugates  
642483-69-0D, drug conjugates  
642483-73-6D, drug conjugates  
642483-75-8D, drug conjugates  
642483-77-0D, drug conjugates  
642483-79-2D, drug conjugates  
642483-81-6D, drug conjugates  
642483-83-8D, drug conjugates  
642483-85-0D, drug conjugates  
642483-87-2D, drug conjugates  
642483-89-4D, drug conjugates  
642483-91-8D, drug conjugates  
642483-93-0D, drug conjugates  
642483-95-2D, drug conjugates  
642483-97-4D, drug conjugates  
642483-99-6D, drug conjugates  
642484-01-3D, drug conjugates  
642484-03-5D, drug conjugates  
642484-05-7D, drug conjugates  
642484-07-9D, drug conjugates  
642484-09-1D, drug conjugates  
642484-11-5D, drug conjugates  
642484-13-7D, drug conjugates  
642484-15-9D, drug conjugates  
642484-17-1D, drug conjugates  
642484-19-3D, drug conjugates  
642484-21-7D, drug conjugates  
642484-23-9D, drug conjugates  
642484-25-1D, drug conjugates  
642484-27-3D, drug conjugates  
642484-29-5D, drug conjugates  
642484-31-9D, drug conjugates  
~~642484-33-1D, drug~~  
conjugates 642484-35-3D, drug  
conjugates 642484-37-5D, drug  
conjugates 642484-39-7D, drug conjugates  
642484-41-1D, drug conjugates  
642484-43-3D, drug conjugates  
642484-45-5D, drug conjugates  
642484-47-7D, drug conjugates  
642484-49-9D, drug conjugates  
642484-51-3D, drug conjugates  
642484-53-5D, drug conjugates  
~~642484-55-7D, drug conjugates~~  
642484-57-9D, drug conjugates  
642484-59-1D, drug conjugates  
642484-61-5D, drug conjugates  
642484-63-7D, drug conjugates  
642484-65-9D, drug conjugates  
642484-67-1D, drug conjugates  
642484-69-3D, drug conjugates  
642484-71-7D, drug conjugates

642484-72-8D, drug conjugates	642484-73-9D, drug conjugates
642484-74-0D, drug conjugates	642484-75-1D, drug conjugates
642484-76-2D, drug conjugates	642484-77-3D, drug conjugates
642484-78-4D, drug conjugates	642484-79-5D, drug conjugates
642484-80-8D, drug conjugates	642484-81-9D, drug conjugates
642484-82-0D, drug conjugates	642484-83-1D, drug conjugates
642484-84-2D, drug conjugates	642484-85-3D, drug conjugates
642484-86-4D, drug conjugates	642484-87-5D, drug conjugates
642484-88-6D, drug conjugates	

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amino acid sequence, as prodrug; peptide conjugates with drugs as prodrugs for activation by tissue or cell-specific proteinases)

IT 642484-89-7D, drug conjugates	642484-90-0D, drug conjugates
642484-91-1D, drug conjugates	642484-92-2D, drug conjugates
642484-93-3D, drug conjugates	642484-94-4D, drug conjugates
642484-95-5D, drug conjugates	642484-96-6D, drug conjugates
642484-97-7D, drug conjugates	642484-98-8D, drug conjugates
642484-99-9D, drug conjugates	642485-00-5D, drug conjugates
642485-01-6D, drug conjugates	642485-02-7D, drug conjugates
642485-03-8D, drug conjugates	642485-04-9D, drug conjugates
642485-05-0D, drug conjugates	642485-06-1D, drug conjugates
642485-07-2D, drug conjugates	642485-08-3D, drug conjugates
642485-09-4D, drug conjugates	642485-10-7D, drug conjugates
642485-11-8D, drug conjugates	642485-12-9D, drug conjugates
642485-13-0D, drug conjugates	642485-14-1D, drug conjugates
642485-15-2D, drug conjugates	642485-16-3D, drug conjugates
642485-17-4D, drug conjugates	642485-18-5D, drug conjugates
642485-19-6D, drug conjugates	642485-20-9D, drug conjugates
642485-21-0D, drug conjugates	642485-27-6D, drug conjugates
642485-29-8D, drug conjugates	642485-30-1D, drug conjugates
642485-31-2D, drug conjugates	642485-32-3D, drug conjugates
642485-33-4D, drug conjugates	642485-34-5D, drug conjugates
642485-35-6D, drug conjugates	642485-36-7D, drug conjugates
642485-37-8D, drug conjugates	642485-38-9D, drug conjugates
642485-39-0D, drug conjugates	642485-40-3D, drug conjugates
642485-41-4D, drug conjugates	642485-42-5D, drug conjugates
642485-43-6D, drug conjugates	642485-44-7D, drug conjugates
642485-45-8D, drug conjugates	642485-46-9D, drug conjugates
642485-47-0D, drug conjugates	642485-48-1D, drug conjugates
642485-49-2D, drug conjugates	642485-50-5D, drug conjugates
642485-52-7D, drug conjugates	642485-53-8D, drug conjugates
642485-54-9D, drug conjugates	642485-55-0D, drug conjugates
642485-56-1D, drug conjugates	642485-57-2D, drug conjugates
642485-58-3D, drug conjugates	642485-59-4D, drug conjugates
642485-60-7D, drug conjugates	642485-61-8D, drug conjugates
642485-62-9D, drug conjugates	642485-63-0D, drug conjugates
642485-64-1D, drug conjugates	642928-58-3D, drug conjugates
642928-61-8D, drug conjugates	642928-64-1D, drug conjugates
642928-67-4D, drug conjugates	642928-70-9D, drug conjugates
642928-73-2D, drug conjugates	642928-76-5D, drug conjugates
642928-79-8D, drug conjugates	642928-81-2D, drug conjugates
642928-83-4D, drug conjugates	642928-85-6D, drug conjugates
642928-87-8D, drug conjugates	642928-90-3D, drug conjugates
642928-92-5D, drug conjugates	642928-94-7D, drug conjugates
642928-96-9D, drug conjugates	

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amino acid sequence, as prodrug; peptide conjugates with drugs as prodrugs for activation by tissue or cell-specific proteinases)

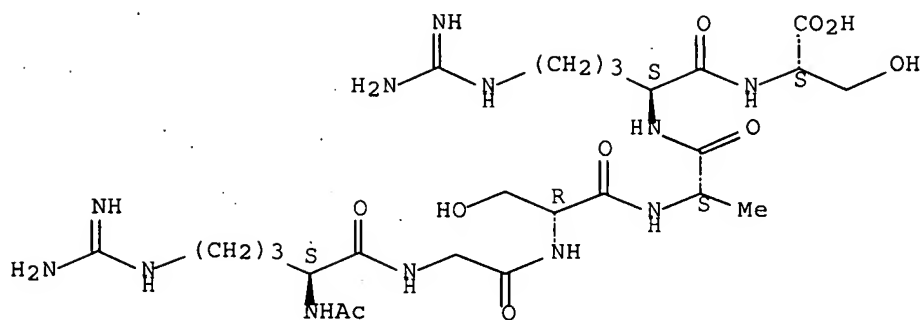
IT 50-07-7D, Mitomycin C, derivs., peptide conjugates 50-18-0D, Cyclophosphamide, derivs., peptide conjugates 50-44-2D, 6-Mercaptopurine, derivs., peptide conjugates 51-21-8D, 5-Fluorouracil, derivs., peptide conjugates 54-62-6D, Aminopterin, derivs., peptide conjugates 57-22-7D, Vincristine, derivs., peptide conjugates 59-05-2D, Methotrexate, derivs., peptide conjugates 91-18-9D, Pteridine, derivs., peptide conjugates 147-94-4D, Cytosine arabinoside, derivs., peptide conjugates 148-82-3D, Melphalan, derivs., peptide conjugates 518-28-5D, Podophyllotoxin, derivs., peptide conjugates 528-74-5D, DichloroMethotrexate, derivs., peptide conjugates 801-52-5D, Porfiromycin, derivs., peptide conjugates 865-21-4D, Vinblastine, derivs., peptide conjugates 1404-00-8D, Mitomycin, derivs., peptide conjugates 2410-93-7D, Methopterin, derivs., peptide conjugates 2998-57-4D, Estramustine, derivs., peptide conjugates 3352-69-0D, 4-Desacetylvinblastine, derivs., peptide conjugates 9035-58-9, Blood-coagulation factor III 9061-61-4, Nerve *growth* factor 11056-06-7D, Bleomycin, derivs., peptide conjugates 11096-26-7, Erythropoietin 15228-71-4D, Leurosidine, derivs., peptide conjugates 15663-27-1D, Cisplatin, derivs., peptide conjugates 20830-81-3D, Daunorubicin, derivs., peptide conjugates 23360-92-1D, Leurosine, derivs., peptide conjugates 33069-62-4D, Taxol, derivs., peptide conjugates 35846-53-8D, Maytansine, derivs., peptide conjugates 39472-31-6D, Carminomycin, derivs., peptide conjugates 57103-68-1D, Maytansinol, derivs., peptide conjugates 62031-54-3, Fibroblast *growth* factor 62229-50-9, *Epidermal growth* factor 82855-09-2D, Combretastatin, derivs., peptide conjugates 83869-56-1, GM-CSF 114977-28-5D, Taxotere, derivs., peptide conjugates 117091-64-2D, Etoposide phosphate, derivs., peptide conjugates 139639-23-9, Tissue plasminogen activator 143011-72-7, G-CSF 152044-53-6D, Epothilone A, derivs., peptide conjugates 152044-54-7D, Epothilone B, derivs., peptide conjugates  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (peptide conjugates, as prodrugs; peptide conjugates with drugs as prodrugs for activation by tissue or cell-specific proteinases)

IT 642484-32-0D, drug conjugates 642484-33-1D, drug conjugates 642484-34-2D, drug conjugates 642484-36-4D, drug conjugates 642484-55-7D, drug conjugates 642484-58-0D, drug conjugates 642485-56-1D, drug conjugates  
 RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (amino acid sequence, as prodrug; peptide conjugates with drugs as prodrugs for activation by tissue or cell-specific proteinases)

RN 642484-32-0 ZCAPLUS

CN L-Serine, N2-acetyl-L-arginylglycyl-D-seryl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

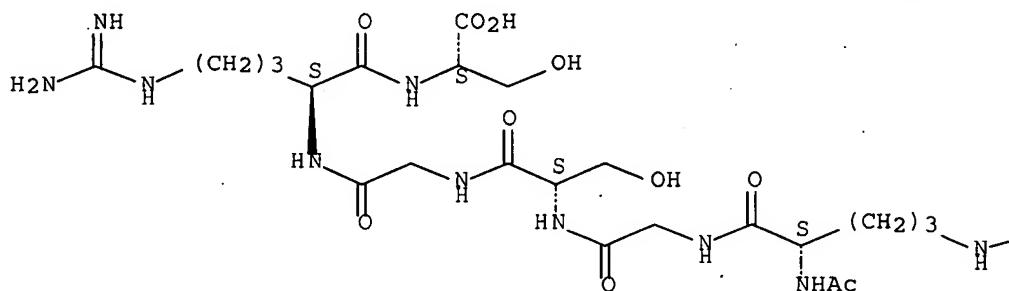


RN 642484-33-1 ZCAPLUS

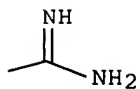
CN L-Serine, N2-acetyl-L-arginylglycyl-L-serylglycyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



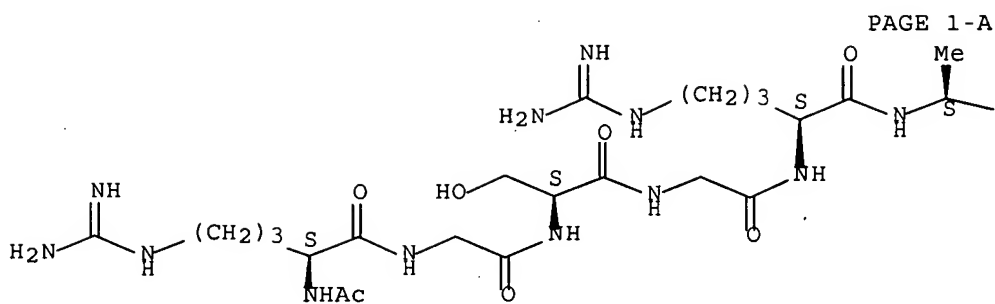
PAGE 1-B



RN 642484-34-2 ZCAPLUS

CN L-Alanine, N2-acetyl-L-arginylglycyl-L-serylglycyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



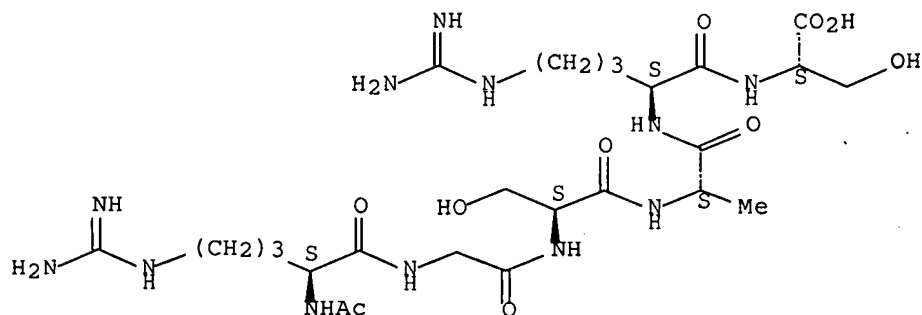
PAGE 1-B

—CO<sub>2</sub>H

RN 642484-36-4 ZCAPLUS

CN L-Serine, N2-acetyl-L-arginylglycyl-L-seryl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

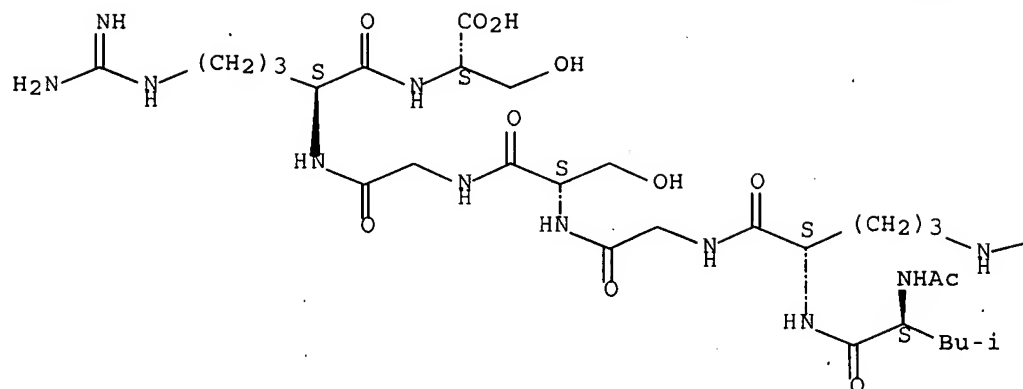


RN 642484-55-7 ZCAPLUS

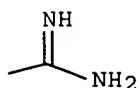
CN L-Serine, N-acetyl-L-leucyl-L-arginylglycyl-L-serylglycyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



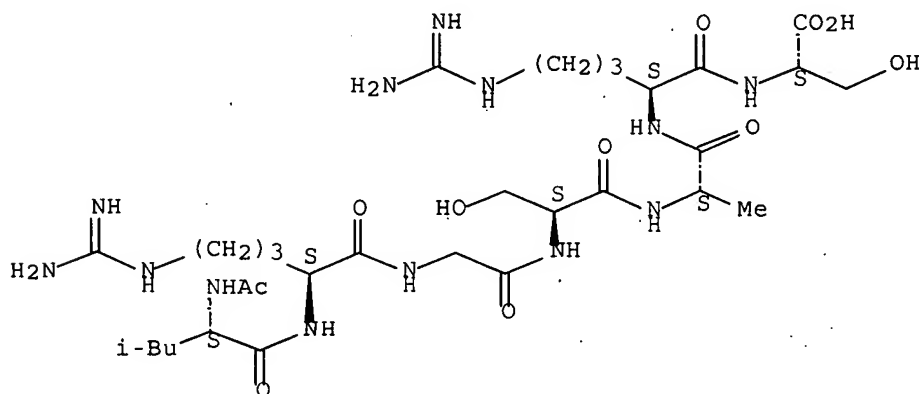
PAGE 1-B



RN 642484-58-0 ZCAPLUS

CN L-Serine, N-acetyl-L-leucyl-L-arginylglycyl-L-seryl-L-alanyl-L-arginyl-  
(9CI) (CA INDEX NAME)

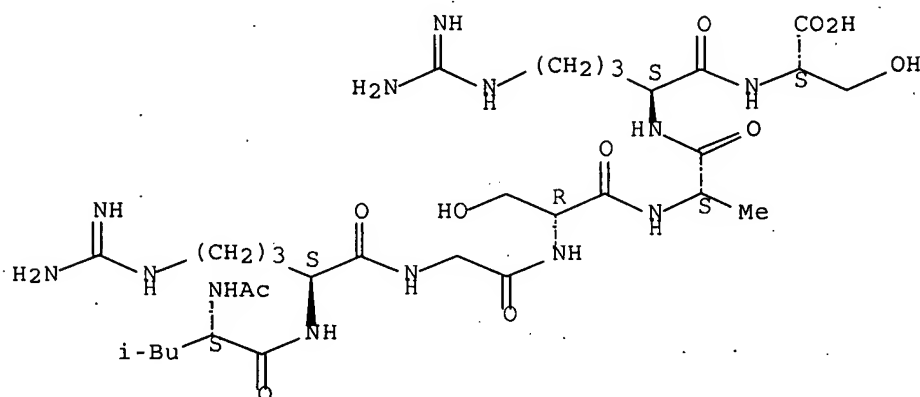
Absolute stereochemistry.



RN 642485-56-1 ZCAPLUS

CN L-Serine, N-acetyl-L-leucyl-L-arginylglycyl-D-seryl-L-alanyl-L-arginyl-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 23 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:610601 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 139:145561  
 TITLE: Transport peptides and uses for delivering drugs to target cells  
 INVENTOR(S): Giordano, Frank J.; Sessa, William C.  
 PATENT ASSIGNEE(S): Yale University, USA  
 SOURCE: PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003064614	A2	20030807	WO 2003-US2715	20030130 <--
WO 2003064614	A3	20031113		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2474807 A1 20030807 CA 2003-2474807 20030130 <-- EP 1476176 A2 20041117 EP 2003-705981 20030130 <-- R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK US 2005181474 A1 20050818 US 2003-502875 20030130 <-- PRIORITY APPLN. INFO.: US 2002-352745P P 20020130 <-- WO 2003-US2715 W 20030130				



AB The invention describes isolated transport peptides, which cross the cell membrane of a cell and/or home to a target cell. The invention also describes a transport complex in which a transport peptide is linked to a cargo moiety to be delivered into/to a cell. Methods are disclosed describing delivery of a transport complex into and/or to a cell. Vectors and host cells comprising transport peptides and transport complexes are also described, as well as pharmaceutical compns. including transport complexes of the present invention.

IC ICM C12N

CC 6-3. (General Biochemistry)

Section cross-reference(s): 63

IT Brain

Heart

Muscle

Skin

(delivery of drug to; transport peptides and uses for delivering drugs to target cells)

IT	573649-86-2	573649-87-3	573649-88-4	573649-89-5	573649-90-8
	573649-91-9	573649-92-0	573649-93-1	573649-94-2	573649-95-3
	573649-96-4	573649-97-5	573649-98-6	573649-99-7	573650-00-7
	573650-01-8	573650-02-9	573650-03-0	573650-04-1	573650-05-2
	573650-06-3	573650-07-4	573650-08-5	573650-09-6	573650-10-9
	573650-11-0	573650-12-1	573650-13-2	573650-14-3	573650-15-4
	573650-16-5	573650-17-6	573650-18-7	573650-19-8	573650-20-1
	573650-21-2	573650-22-3	573650-23-4	573650-24-5	573650-25-6
	573650-26-7	573650-27-8	573650-28-9	573650-29-0	573650-30-3
	573650-31-4	573650-32-5	573650-33-6	573650-34-7	573650-35-8
	573650-36-9	573650-37-0	573650-38-1	573650-39-2	573650-40-5
	573650-41-6	573650-42-7	573650-43-8		

RL: BSU (Biological study, unclassified); PRP (Properties); THU

(Therapeutic use); BIOL (Biological study); USES (Uses)

(transport peptide sequence; transport peptides and uses for delivering drugs to target cells)

IT 573650-00-7

RL: BSU (Biological study, unclassified); PRP (Properties); THU

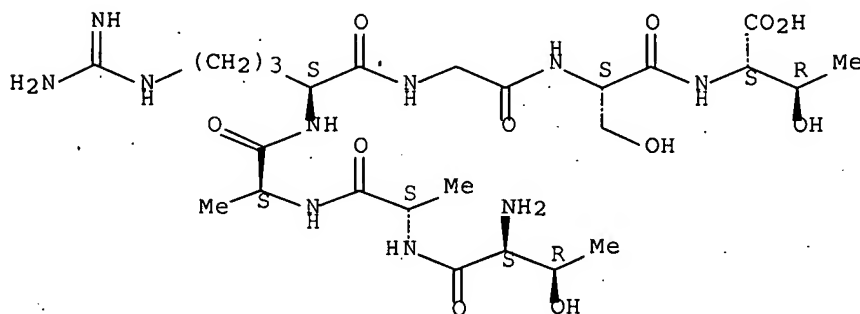
(Therapeutic use); BIOL (Biological study); USES (Uses)

(transport peptide sequence; transport peptides and uses for delivering drugs to target cells)

RN 573650-00-7 ZCAPLUS

CN L-Threonine, L-threonyl-L-alanyl-L-alanyl-L-arginylglycyl-L-seryl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



ACCESSION NUMBER: 2003:591215 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 139:144956  
 TITLE: Ligand binding domains of cytokine which are linked via flexible polypeptide linker and uses in therapy  
 INVENTOR(S): Ross, Richard; Artymiuk, Peter; Sayers, Jon  
 PATENT ASSIGNEE(S): Asterion Limited, UK  
 SOURCE: PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003062276	A2	20030731	WO 2003-GB253	20030124 <--
WO 2003062276	A3	20031016		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2510751	A1	20030731	CA 2003-2510751	20030124 <--
EP 1468020	A2	20041020	EP 2003-702702	20030124 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005529583	T	20051006	JP 2003-562153	20030124 <--
IN 2004KN00972	A	20060505	IN 2004-KN972	20040713 <--
MX 2004PA07160	A	20050331	MX 2004-PA7160	20040723 <--
BR 2004003173	A	20060321	BR 2004-3173	20040730 <--
US 2005214762	A1	20050929	US 2005-502344	20050511 <--
US 2007054364	A1	20070308	US 2006-595991	20061113 <--
PRIORITY APPLN. INFO.:				
			GB 2002-1679	A 20020125 <--
			WO 2003-GB253	W 20030124
			US 2005-502344	B3 20050511

AB The invention relates to the provision of oligomeric polypeptides (dimers, trimers, etc) comprising the ligand binding domains of cytokines which are linked via flexible polypeptide linker mols. The linker mols. optionally comprise protease sensitive sites to modulate the release of biol. active cytokines when administered to a human or animal subject. The invention also relates to chemical crosslinkers wherein the chemical crosslinkers serve to link the ligand binding domains. The chimeric cytokine can be used for treating acromegaly, gigantism, GH deficiency, Turners syndrome, renal failure, osteoporosis, diabetes mellitus, cancer, obesity, insulin resistance, hyperlipidemia, hypertension, anemia, autoimmune and infectious disease, inflammatory disorders including rheumatoid arthritis.

IC ICM C07K014-52  
 CC 3-2 (Biochemical Genetics)  
 Section cross-reference(s): 1, 2, 15  
 ST ligand binding domain cytokine therapy; *growth* hormone linker fusion sequence; leptin linker fusion sequence  
 IT cDNA sequences  
 (for *growth* hormone and leptin; ligand binding domains of cytokines which are linked by chemical crosslinkers and uses in therapy)  
 IT *Growth* disorders, animal

(gigantism, treatment of; ligand binding domains of cytokines which are linked by chemical crosslinkers and uses in therapy)

IT Protein sequences  
(of growth hormone and leptin; ligand binding domains of cytokines which are linked by chemical crosslinkers and uses in therapy)

IT 9002-72-6P, Growth hormone 169494-85-3P, Leptin  
RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(ligand binding domains of cytokines which are linked via flexible polypeptide linker and uses in therapy)

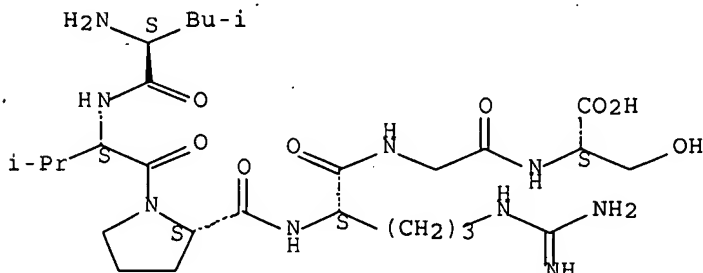
IT 2543-43-3 2543-44-4 158734-08-8 571186-35-1 571186-36-2  
RL: BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(peptide linker; ligand binding domains of cytokines which are linked by chemical crosslinkers and uses in therapy)

IT 158734-08-8  
RL: BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(peptide linker; ligand binding domains of cytokines which are linked by chemical crosslinkers and uses in therapy)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 25 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:117964 ZCAPLUS Full-text

DOCUMENT NUMBER: 138:165523

TITLE: Hybrid proteins with neuregulin heparin-binding domain for targeting to heparan sulfate proteoglycans and therapeutic uses thereof

INVENTOR(S): Loeb, Jeffrey A.

PATENT ASSIGNEE(S): Wayne State University, USA

SOURCE: PCT Int. Appl., 74 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003012045	A2	20030213	WO 2002-US24053	20020731 <--
WO 2003012045	A3	20040701		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,  
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2455830 A1 20030213 CA 2002-2455830 20020731 <--  
AU 2002322762 A1 20030217 AU 2002-322762 20020731 <--  
EP 1456239 A2 20040915 EP 2002-756777 20020731 <--  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK  
JP 2005500052 T 20050106 JP 2003-517223 20020731 <--  
US 2005107601 A1 20050519 US 2003-485206 20020731 <--  
PRIORITY APPLN. INFO.: US 2001-308563P P 20010731 <--  
WO 2002-US24053 W 20020731 <--

AB The present invention discloses that the neuregulin (NRG) heparin binding domain (N-HBD) functions to keep the EGF-like domain at sufficiently high concns. near erbB receptors for a sufficiently long period of time necessary to induce events downstream from receptor binding. In particular, fusion polypeptides are produced that comprise, as a targeting structure, a N-HBD polypeptide, fragment, homolog or functional derivative and a protein to be targeted. This is fused to a polypeptide or peptide being targeted (Ptrg) to cell surfaces rich in heparan sulfate proteoglycans to either activate or inhibit interactions at tyrosine kinase receptors. Such products are used to treat diseases or conditions where either agonism or antagonism at tyrosine kinase receptors has beneficial effects, including cancer and a multitude of diseases of the nervous system. The present inventor examined how NRG-HSPG interactions affect NRG-erbB receptor binding, erbB receptor auto-phosphorylation and downstream activation of AChR genes and newly-synthesized proteins in primary chick myotube cultures.

IC ICM C12N  
CC 6-3 (General Biochemistry)  
Section cross-reference(s): 1, 3  
ST hybrid protein neuregulin heparin binding domain; fusion protein targeting heparan sulfate proteoglycan; protein hybrid modulating *epidermal growth factor acetylcholine receptor*  
IT Cytokines.  
Ephrins  
Growth factors, animal  
Neurotrophic factors  
Transforming *growth factors*  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(as ligand; hybrid proteins with neuregulin heparin-binding domain for targeting to heparan sulfate proteoglycans and therapeutic uses thereof)

IT Antibodies and Immunoglobulins  
*Epidermal growth factor receptors*  
G protein-coupled receptors  
Tyrosine kinase receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(as targeted protein; hybrid proteins with neuregulin heparin-binding domain for targeting to heparan sulfate proteoglycans and therapeutic uses thereof)

IT 9061-61-4, Nerve *growth factor* 62031-54-3, Fibroblast *growth factor* 127464-60-2, Vascular endothelial *growth factor* 130939-66-1, Neurotrophin 3 143375-33-1, Neurotrophin 4  
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(as ligand; hybrid proteins with neuregulin heparin-binding domain for targeting to heparan sulfate proteoglycans and therapeutic uses thereof)

IT 401895-03-2P 401895-04-3P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(fusion protein linker amino acid sequence; hybrid proteins with neuregulin heparin-binding domain for targeting to heparan sulfate proteoglycans and therapeutic uses thereof)

IT 401895-03-2P

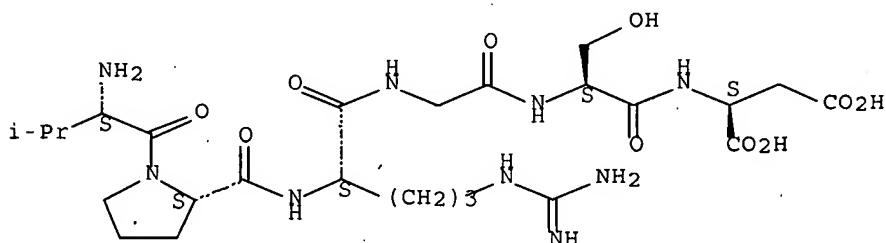
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(fusion protein linker amino acid sequence; hybrid proteins with neuregulin heparin-binding domain for targeting to heparan sulfate proteoglycans and therapeutic uses thereof)

RN 401895-03-2 ZCAPLUS

CN L-Aspartic acid, L-valyl-L-prolyl-L-arginylglycyl-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 26 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:315107 ZCAPLUS Full-text

DOCUMENT NUMBER: 136:339494

TITLE: Monoclonal antibodies or fragments specific to VEGF/PDGF-like factor (VPLF) useful for diagnosis and treatment of angiogenesis-related diseases

INVENTOR(S): Shitara, Kenya; Furuya, Akiko

PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan; Helix Research Institute.

SOURCE: PCT Int. Appl., 136 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

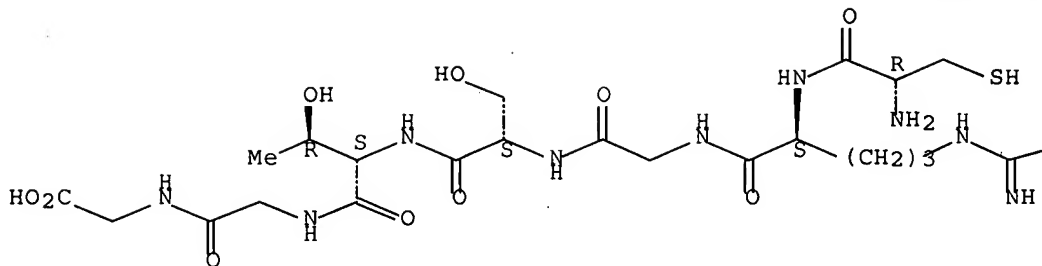
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002033094	A1	20020425	WO 2001-JP9218	20011019 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,			

PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
 US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 AU 2001094274 A5 20020429 AU 2001-94274 20011019 <--  
 CA 2426384 A1 20030417 CA 2001-2426384 20011019 <--  
 EP 1335024 A1 20030813 EP 2001-974890 20011019 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 US 2004086507 A1 20040506 US 2003-399673 20030418 <--  
 PRIORITY APPLN. INFO.: JP 2000-319985 A 20001019 <--  
 WO 2001-JP9218 W 20011019 <--  
 AB Provided are monoclonal antibodies which specifically recognizes VPLF proteins  
 and inhibits the activity of VPLF protein. The monoclonal antibodies are IgG1  
 subclass, secreted by hybridomas KM2764 (FERM BP-7293) and KM2767 (FERM BP-  
 7294), and specifically reacting with human VPLF and inhibiting its activity.  
 This antibody is usable as a remedy or a diagnostic for diseases in which VPLF  
 participates, i.e., diseases associated with abnormal acceleration of  
 angiogenesis, eye diseases based on abnormal angiogenesis, arthritis based on  
 abnormal angiogenesis, skin diseases associated with abnormal angiogenesis,  
 diseases associated with abnormal acceleration of vasopermeability, diseases  
 associated with abnormal differentiation/proliferation of smooth muscular  
 cells, diseases associated with abnormal differentiation/proliferation of  
 kidney mesangial cells, diseases associated with abnormal  
 differentiation/proliferation of blood stem cells, diseases based on  
 abnormality in osteoblasts, diseases based on abnormality in pancreatic sz  
 cells, ischemic diseases and diseases associated with retarded wound healing.  
 IC ICM C12N015-53  
 ICS C12N005-10; C12N001-15; C12N001-19; C12N001-21; C12P021-02;  
 C12P021-08; C07K016-24; A61K039-395; A61P009-10; G01N033-53  
 CC 15-3 (Immunochemistry)  
 Section cross-reference(s): 3, 8, 9  
 IT Arthritis  
 Glaucoma (disease)  
 Hematopoietic disorders  
 Skin, disease  
 (angiogenesis-associated; monoclonal antibodies or fragments specific to  
 VEGF/PDGF-like factor or VPLF useful for diagnosis and treatment of  
 angiogenesis-related diseases)  
 IT 321656-08-0P 321656-09-1P 321656-10-4P 321656-11-5P  
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic  
 preparation); BIOL (Biological study); PREP (Preparation)  
 (monoclonal antibodies or fragments specific to VEGF/PDGF-like factor  
 or VPLF useful for diagnosis and treatment of angiogenesis-related  
 diseases)  
 IT 321656-11-5P  
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic  
 preparation); BIOL (Biological study); PREP (Preparation)  
 (monoclonal antibodies or fragments specific to VEGF/PDGF-like factor  
 or VPLF useful for diagnosis and treatment of angiogenesis-related  
 diseases)  
 RN 321656-11-5 ZCAPLUS  
 CN Glycine, L-cysteinyl-L-arginylglycyl-L-seryl-L-threonylglycyl- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.

—NH<sub>2</sub>

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 27 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:185354 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 136:227913  
 TITLE: Biopanning and rapid analysis of selective interactive ligands (BRASIL)  
 INVENTOR(S): Arap, Wadih; Pasqualini, Renata  
 PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA  
 SOURCE: PCT Int. Appl., 167 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020822	A2	20020314	WO 2001-US28124	20010907 <--
WO 2002020822	A3	20020627		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2421380	A1	20020314	CA 2001-2421380	20010907 <--
AU 200188914	A	20020322	AU 2001-88914	20010907 <--
EP 1315840	A2	20030604	EP 2001-968683	20010907 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004530404	T	20041007	JP 2002-525828	20010907 <--
CA 2496938	A1	20040311	CA 2002-2496938	20021030 <--
WO 2004020999	A1	20040311	WO 2002-US34987	20021030 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002364501	A1	20040319	AU 2002-364501	20021030 <--
EP 1546714	A1	20050629	EP 2002-799873	20021030 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

US 2005074747	A1	20050407	US 2004-363205	20040715 <--
US 2006094672	A1	20060504	US 2004-489071	20041013 <--
US 2006239968	A1	20061026	US 2006-530168	20060223 <--

PRIORITY APPLN. INFO.:

			US 2000-231266P	P 20000908 <--
			US 2001-765101	A 20010117 <--
			US 2001-97651	A 20010117 <--
			WO 2001-US28124	W 20010907 <--
			WO 2002-US27836	A 20020830 <--
			WO 2002-US34987	W 20021030 <--

AB The present invention concerns novel methods of identifying peptide sequences that selectively bind to targets. In alternative embodiments, targets may comprise cells or clumps of cells, particles attached to chems. compds., mols. or aggregates, or parasites. In preferred embodiments, target cells are sorted before exposure to the phage library. The general method, Biopanning and Rapid Anal. of Selective Interactive Ligands (BRASIL) provides for rapid and efficient separation of phage that bind to targets, while preserving unbound phage. BRASIL may be used in preselection procedure to subtract phage that bind non-specifically to a first target before exposing the subtracted library to a second target. Certain embodiments concern targeting peptides identified by BRASIL and methods of use of such peptides for targeted delivery of therapeutic agents or imaging agents or diagnosis or treatment of diseases. Novel compns. comprising a first phase, second phase, target and a phage library are also disclosed. BASIL is exemplified by screening for targeting peptides for (1) VEGF in HUVEC cells, (2) the Molt-4 leukemia cell line, (3) urothelial tissue (human bladder wall), (4) mesenchymal stem cells, and (5) screening for bone marrow targeting peptides.

IC ICM C12Q

CC 3-1 (Biochemical Genetics)

Section cross-reference(s): 9, 13

ST BASIL biopanning selective interactive ligand; targeting peptide screening  
 BASIL biopanning; VEGF targeting peptide screening biopanning; leukemia targeting peptide screening biopanning; urothelial tissue targeting peptide screening biopanning; bone marrow targeting peptide screening biopanning; stem cell targeting peptide screening biopanning

IT Angiogenic factors

Chemokines

Cytokines

Growth factors, animal

Hormones, animal, biological studies

Neurotransmitters

Toxins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)



(cells activated by; biopanning and rapid anal. of selective interactive ligands (BRASIL))

- IT AIDS (disease)  
 Alzheimer's disease  
 Arthritis  
 Atherosclerosis  
 Autoimmune disease  
 Cardiovascular system, disease  
 Diabetes mellitus  
 Hodgkin's disease  
 Inflammation  
 Leukemia  
 Lung, neoplasm  
 Mammary gland, neoplasm  
 Ovary, neoplasm  
 Parkinson's disease  
 Prostate gland, neoplasm  
 Skin, neoplasm  
 (diagnosis of; biopanning and rapid anal. of selective interactive ligands (BRASIL))
- IT Amoeba  
 Angiogenesis  
 Animal cell  
 Bladder  
 Bone marrow  
 Embryo, animal  
 Erythrocyte  
 Escherichia coli  
 Eubacteria  
 Fungi  
 Giardia  
 Hematopoietic precursor cell  
 Legionella  
 Leishmania  
 Leukemia  
 Liver  
 Lymph node  
 Lymphocyte  
 Mold (fungus)  
 Neoplasm  
 Pathogen  
 Plant cell  
 Plasmodium falciparum  
 Salmonella  
 Spleen  
 Trypanosoma brucei  
 Trypanosoma cruzi  
 Yeast  
 (screening for targeting peptides for; biopanning and rapid anal. of selective interactive ligands (BRASIL))
- IT 127464-60-2, Vascular endothelial growth factor  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (screening for targeting peptides for; biopanning and rapid anal. of selective interactive ligands (BRASIL))
- IT 184240-25-3 184240-26-4 184240-32-2 286380-02-7 402751-23-9  
 402751-29-5 402751-35-3 402751-40-0 402751-46-6 402751-51-3  
 402751-55-7 402751-58-0 402751-60-4 402751-61-5 402751-62-6  
 402751-63-7 402751-64-8 402751-68-2 402751-69-3 402751-70-6  
 402751-71-7 402751-73-9 402751-74-0 402751-76-2 402751-78-4  
 402751-79-5 402751-81-9 402751-82-0 402751-83-1 402751-84-2

402751-86-4	402751-87-5	402751-88-6	402751-89-7	402751-91-1
402751-92-2	402751-93-3	402751-94-4	402751-95-5	402751-96-6
402751-97-7	402751-98-8	402751-99-9	402752-00-5	402752-01-6
402752-02-7	402752-03-8	402752-04-9	402752-05-0	402752-06-1
402752-07-2	402752-08-3	402752-09-4	402752-10-7	402752-11-8
402752-12-9	402752-13-0	402752-14-1	402752-16-3	402752-18-5
402752-19-6	402752-20-9	402752-21-0	402752-22-1	402752-23-2
402752-24-3	402752-25-4	402752-26-5	402752-27-6	402752-28-7
402752-29-8	402752-30-1	402752-31-2	402752-32-3	402752-33-4
402752-34-5	402752-35-6	402752-36-7	402752-37-8	402752-38-9
402752-39-0	402752-40-3	402752-42-5	402752-43-6	402752-44-7
402752-45-8	402752-46-9	402752-47-0	402752-48-1	402752-49-2
402752-50-5	402752-51-6	402752-52-7	402752-53-8	402752-54-9
402752-55-0	402752-56-1	402752-57-2	402752-58-3	402752-59-4
402752-60-7	402752-61-8	402752-62-9	402752-63-0	402752-64-1
402752-65-2	402752-66-3	402752-67-4	402752-68-5	402752-69-6
402752-70-9	402752-71-0	402752-72-1	402752-73-2	402752-74-3
402752-75-4	402752-76-5	402752-77-6	402752-79-8	402752-80-1
402752-81-2	402752-82-3	402752-83-4	402752-84-5	402752-85-6
402752-86-7	402752-87-8	402752-88-9	402752-89-0	402752-90-3
402752-92-5	402752-94-7	402752-96-9	402752-98-1	402752-99-2
402753-00-8	402753-01-9	402753-02-0	402753-03-1	402753-04-2
402753-05-3	402753-06-4	402753-07-5	402753-08-6	402753-09-7
402753-10-0	402753-16-6	402753-17-7	402753-19-9	402753-21-3
402753-23-5	402753-24-6	402753-25-7	402753-26-8	
402753-27-9	402753-28-0	402753-29-1	402753-30-4	402753-31-5
402753-32-6	402753-33-7	402753-34-8	402753-35-9	402753-36-0
402753-37-1	402753-38-2	402753-39-3	402753-40-6	402753-41-7
402753-42-8	402753-43-9	402753-44-0	402753-45-1	402753-46-2
402753-47-3	402753-48-4	402753-49-5	402753-51-9	402753-52-0
402753-53-1	402753-54-2	402753-55-3	402753-56-4	402753-57-5
402753-58-6	402753-59-7	402753-60-0	402753-61-1	402753-62-2
402753-63-3	402753-64-4	402753-65-5	402753-66-6	402753-67-7
402753-68-8	402753-69-9	402753-70-2	402753-71-3	402753-72-4
402753-73-5	402753-74-6	402753-75-7	402753-76-8	402753-77-9
402753-78-0	402753-79-1	402753-81-5	402753-82-6	402753-83-7
402753-84-8	402753-85-9	402753-86-0	402753-87-1	402753-88-2
402753-89-3	402753-90-6	402753-91-7	402753-92-8	402753-93-9
402753-94-0	402753-95-1	402753-97-3	402753-99-5	402754-00-1
402754-01-2	402754-02-3	402754-03-4	402754-04-5	402754-05-6
402754-06-7	402754-07-8	402754-08-9	402754-09-0	402754-10-3
402754-11-4				

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses).

(targeting peptide; biopanning and rapid anal. of selective interactive ligands (BRASIL))

IT 402753-24-6

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(targeting peptide; biopanning and rapid anal. of selective interactive ligands (BRASIL))

RN 402753-24-6 ZCAPLUS

CN L-Cysteine, L-cysteinyl-L-arginylglycyl-L-seryl-L-alanyl-L-valyl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020723	A2	20020314	WO 2001-US28044	20010907 <--
WO 2002020723	A3	20020829		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2421195	A1	20020314	CA 2001-2421195	20010907 <--
AU 200190662	A	20020322	AU 2001-90662	20010907 <--
EP 1315830	A2	20030604	EP 2001-970681	20010907 <--
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004533803	T	20041111	JP 2002-525730	20010907 <--

CA 2496938	A1	20040311	CA 2002-2496938	20021030 <--
WO 2004020999	A1	20040311	WO 2002-US34987	20021030 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002364501	A1	20040319	AU 2002-364501	20021030 <--
EP 1546714	A1	20050629	EP 2002-799873	20021030 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2006094672	A1	20060504	US 2004-489071	20041013 <--
US 2006239968	A1	20061026	US 2006-530168	20060223 <--
PRIORITY APPLN. INFO.:				
			US 2000-231266P	P 20000908 <--
			US 2001-765101	A 20010117 <--
			US 2001-97651	A 20010117 <--
			WO 2001-US28044	W 20010907 <--
			WO 2002-US27836	A 20020830 <--
			WO 2002-US34987	W 20021030 <--

AB The present invention concerns methods and compns. for identifying human targeting peptides sequences. The methods used for phage display biopanning in the mouse model system require substantial improvements for use with humans. In general, humans suitable for use with phage display are either brain dead or terminal wean patients. The amount of phage library (preferably primary library) required for administration must be significantly increased, preferably 5 orders of magnitude to 10<sup>14</sup> TU or higher, preferably administered i.v. in .apprx.200 mL of Ringer lactate solution over about a 10-min period. To produce such large phage libraries, the transformed bacterial pellets recovered from up to 500-1000 transformations are amplified up to 10 times in the bacterial host, recovering the phage from each round of amplification and adding LB Tet medium to the bacterial pellet for collection of addnl. phage. Samples of various organs and tissues are collected starting .apprx.15 min after injection of the phage library; samples are processed and phage collected from each organ, tissue or cell type of interest for DNA sequencing to determine the amino acid sequences of targeting peptides. A substantial improvement in the biopanning technique involves polyorgan targeting. It is possible to pool phage collected from multiple organs after a first round of biopanning and inject the pooled sample into a new subject, where each of the multiple organs may be collected for phage rescue, and the protocol repeated for as many rounds of biopanning as desired. In this manner, it is possible to significantly reduce the number of subjects required for isolation of targeting peptides for multiple organs, while still achieving substantial enrichment of the organ-homing phage. Thus, 320 targeting peptides are identified with specificity for bone marrow, adipose tissue, skeletal muscle, prostate, skin, or multiple organs. The peptides are of use for targeted delivery of therapeutic agents, including gene therapy vectors. Such targeted delivery may be used for detection, diagnosis or treatment of human diseases. In certain embodiments, the peptide may be attached to an imaging agent and administered to a human to obtain an image or to diagnose a disease state. Also disclosed are a large number of targeting peptide sequences and consensus motifs that are selective for human organs or tissues, obtained by the methods of the present invention.

IC ICM C12N  
CC 3-1 (Biochemical Genetics)  
Section cross-reference(s): 9, 13, 63

IT Antibodies and Immunoglobulins  
 Antigens  
 Cytokines  
 Fibronectins  
   Growth factors, animal  
 Hormone antagonists  
 Hormones, animal, biological studies  
 Interferons  
 Interleukin 1  
 Interleukin 10  
 Interleukin 11  
 Interleukin 12  
 Interleukin 18  
 Interleukin 2  
 Interleukin 5  
 Laminins  
 Macrophage inflammatory protein 2 $\alpha$   
 Proteins  
 Thrombospondins  
 Tumor necrosis factors  
 RL: BUU (Biological use; unclassified); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
   (conjugated with targeting peptides; phage display libraries and  
   methods for identifying targeting peptides in humans in vivo)

IT Adipose tissue  
 Animal cell  
 Animal tissue  
   Bone marrow  
 Kidney  
 Muscle  
 Organ, animal  
 Prostate gland  
   Skin  
     (targeting peptides specific for; phage display libraries and methods  
     for identifying targeting peptides in humans in vivo)

IT 556-33-2P 17343-02-1P 17608-53-6P 403701-54-2P 403701-55-3P  
 403701-56-4P 403701-57-5P 403701-58-6P 403701-59-7P 403701-60-0P  
 403701-61-1P 403701-62-2P 403701-63-3P 403701-64-4P 403701-65-5P  
 403701-66-6P 403701-67-7P 403701-68-8P 403701-69-9P 403701-70-2P  
 403703-49-1P 403703-50-4P 403703-51-5P  
 RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified);  
 DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
   (targeting peptide for human bone marrow; phage display  
   libraries and methods for identifying targeting peptides in humans in  
   vivo)

IT 20762-31-6P 54944-27-3P 55488-08-9P 61257-72-5P 178440-08-9P  
 220378-50-7P 403701-07-5P 403701-08-6P 403701-09-7P  
 403701-10-0P 403701-11-1P 403701-12-2P 403701-13-3P 403701-14-4P  
 403701-15-5P 403701-16-6P 403701-17-7P 403701-18-8P 403701-19-9P  
 403701-20-2P 403701-21-3P 403701-22-4P 403701-23-5P 403701-24-6P  
 403701-25-7P 403701-26-8P 403701-27-9P 403701-28-0P 403701-29-1P  
 403701-30-4P 403701-31-5P 403701-32-6P 403701-33-7P 403701-34-8P  
 403701-35-9P 403701-36-0P 403701-37-1P 403701-38-2P 403701-39-3P  
 403701-40-6P 403701-41-7P 403701-42-8P 403701-43-9P 403701-44-0P  
 403701-45-1P 403701-46-2P 403701-47-3P 403701-48-4P 403701-49-5P  
 403701-50-8P 403701-51-9P 403701-52-0P  
 RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified);  
 DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)



GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,  
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
 US, UZ, VN, YU, ZA, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,  
 KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,  
 GQ, GW, ML, MR, NE, SN, TD, TG

CA 2421191 A1 20020314 CA 2001-2421191 20010907 <--  
 AU 200190652 A 20020322 AU 2001-90652 20010907 <--  
 EP 1315965 A2 20030604 EP 2001-970671 20010907 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004515751 T 20040527 JP 2002-525729 20010907 <--  
 CA 2496938 A1 20040311 CA 2002-2496938 20021030 <--  
 WO 2004020999 A1 20040311 WO 2002-US34987 20021030 <--  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002364501 A1 20040319 AU 2002-364501 20021030 <--  
 EP 1546714 A1 20050629 EP 2002-799873 20021030 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

US 2004048243 A1 20040311 US 2003-363208 20030902 <--  
 US 2006094672 A1 20060504 US 2004-489071 20041013 <--  
 US 2006239968 A1 20061026 US 2006-530168 20060223 <--

PRIORITY APPLN. INFO.:  
 US 2000-231266P P 20000908 <--  
 US 2001-765101 A 20010117 <--  
 US 2001-97651 A 20010117 <--  
 WO 2001-US27702 W 20010907 <--  
 WO 2002-US27836 A 20020830 <--  
 WO 2002-US34987 W 20021030 <--

AB Methods of identify cell or tissue-specific peptide ligands and their cognate receptors for use in targeted drug delivery or gene therapy. A large number of targeting peptides directed towards human organs, tissues or cell types are disclosed. The peptides are of use for targeted delivery of therapeutic agents, including but not limited to gene therapy vectors. A novel class of gene therapy vectors is disclosed. Certain of the disclosed peptides have therapeutic use for inhibiting angiogenesis, inhibiting tumor growth, inducing apoptosis, inhibiting pregnancy or inducing weight loss. Methods of identifying novel targeting peptides in humans, as well as identifying endogenous receptor-ligand pairs are disclosed. Methods of identifying novel infectious agents that are causal for human disease states are also disclosed. A novel mechanism for inducing apoptosis is further disclosed. Screening of a phage display library by direct incubation with bone marrow to identify bone marrow-specific ligand peptides is demonstrated. The use of circulating antibodies from prostate cancer patients to identify the antigens. One of the antigens, identified as GRP78, was a strong indicator of survival time and could be used as a prognostic marker. Successful targeting of adeno-associated virus-based vectors to vascular endothelium is demonstrated.

IC ICM C12N  
 CC 3-1 (Biochemical Genetics)  
 Section cross-reference(s): 6, 63

IT Angiogenic factors  
 Chemokines  
 Cytokines  
   Growth factors, animal  
 Hormones, animal, biological studies  
 Neurotransmitters  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
   (for cell stimulation in screening peptide libraries by direct cell  
   binding; screening of peptide libraries to identify highly specific  
   ligands and cognate receptors for cell or tissue-specific targeting)

IT Bone marrow  
 Prostate gland, neoplasm  
   (selection of peptides targeting; screening of peptide libraries to  
   identify highly specific ligands and cognate receptors for cell or  
   tissue-specific targeting)

IT

404334-37-8	404334-38-9	404334-39-0	404334-40-3	404334-41-4
404334-42-5	404334-43-6	404334-44-7	404334-45-8	404334-46-9
404334-47-0	404334-48-1	404334-49-2	404334-51-6	404334-52-7
404334-53-8	404334-92-5	404334-93-6	404334-94-7	404334-96-9
404334-97-0	404334-98-1	404334-99-2	404335-00-8	404335-01-9
404335-02-0	404335-03-1	404335-04-2	404335-05-3	404335-06-4
404335-07-5	404335-08-6	404335-09-7	404335-10-0	404335-11-1
404335-12-2	404335-13-3	404335-14-4	404335-15-5	404335-16-6
404335-17-7	404335-18-8	404335-19-9	404335-20-2	404335-21-3
404335-22-4	404335-23-5	404335-24-6	404335-25-7	404335-26-8
404335-27-9	404335-28-0	404335-29-1	404335-30-4	404335-31-5
404335-32-6	404335-33-7	404335-34-8	404335-35-9	404335-36-0
404335-37-1	404335-38-2	404335-39-3	404335-40-6	404335-41-7
404335-42-8	404335-43-9	404335-44-0	404335-45-1	404335-46-2
404335-87-1	404367-50-6	404367-51-7	404367-52-8	404367-53-9
404367-54-0	404367-55-1	404367-56-2	404367-57-3	404367-58-4
404367-59-5	404367-60-8	404367-61-9	404367-62-0	404367-63-1
404367-64-2	404367-65-3	404367-66-4	404367-67-5	404367-68-6
404367-69-7	404367-70-0	404367-71-1	404367-72-2	404367-73-3
404367-74-4	404367-75-5	404367-76-6	404367-77-7	404367-78-8
404367-79-9	404367-80-2	404367-81-3	404367-82-4	404367-83-5
404367-84-6	404367-85-7	404367-86-8	404367-87-9	404367-88-0
404367-89-1	404367-90-4	404367-91-5	404367-92-6	404367-93-7
404367-94-8	404367-95-9	404367-96-0	404367-97-1	404367-98-2
404367-99-3	404368-00-9	404368-01-0	404368-02-1	404368-03-2
404368-04-3	404368-05-4	404368-06-5	404368-07-6	404368-08-7
404368-09-8	404368-10-1	404368-11-2	404368-12-3	404368-13-4
404368-14-5	404368-15-6	404368-16-7	404368-17-8	404368-18-9
404368-19-0	404368-20-3	404368-21-4	404368-22-5	404368-23-6
404368-24-7	404368-25-8	404368-26-9	404368-27-0	
404368-28-1	404368-29-2	404368-30-5	404368-31-6	404368-32-7
404368-33-8	404368-34-9	404368-35-0	404368-36-1	404368-37-2
404368-38-3	404368-39-4	404368-40-7	404368-41-8	404368-42-9
404368-43-0	404368-45-2	404368-46-3	404368-47-4	404368-48-5
404368-49-6	404368-50-9	404368-51-0	404368-52-1	404368-53-2
404368-54-3	404368-55-4	404368-56-5	404368-57-6	404368-58-7
404368-59-8	404368-60-1	404368-61-2	404368-62-3	404368-63-4
404368-64-5	404368-65-6	404368-66-7	404368-67-8	404368-68-9
404368-69-0	404368-70-3	404368-71-4	404368-72-5	404368-73-6
404368-74-7	404368-75-8	404368-76-9	404368-77-0	404368-78-1
404368-79-2	404368-80-5	404368-81-6	404368-82-7	404368-83-8
404368-84-9	404368-85-0	404368-86-1	404368-87-2	404368-88-3
404368-89-4	404368-90-7	404368-91-8	404368-92-9	404368-93-0
404368-94-1	404368-95-2	404368-96-3	404368-97-4	404368-98-5



404368-99-6    404369-00-2    404369-01-3    404369-02-4    404559-14-4  
404559-15-5    404559-16-6    404573-98-4

RL: BUU (Biological use, unclassified); DGN (Diagnostic use); PRP (Properties); *THU* (Therapeutic use); BIOL (Biological study);  
USES (Uses)

(amino acid sequence, cell type-specific peptide ligand; screening of peptide libraries to identify highly specific ligands and cognate receptors for cell or tissue-specific targeting)

IT 404368-27-0

RL: BUU (Biological use, unclassified); DGN (Diagnostic use); PRP (Properties); *THU* (Therapeutic use); BIOL (Biological study);  
USES (Uses)

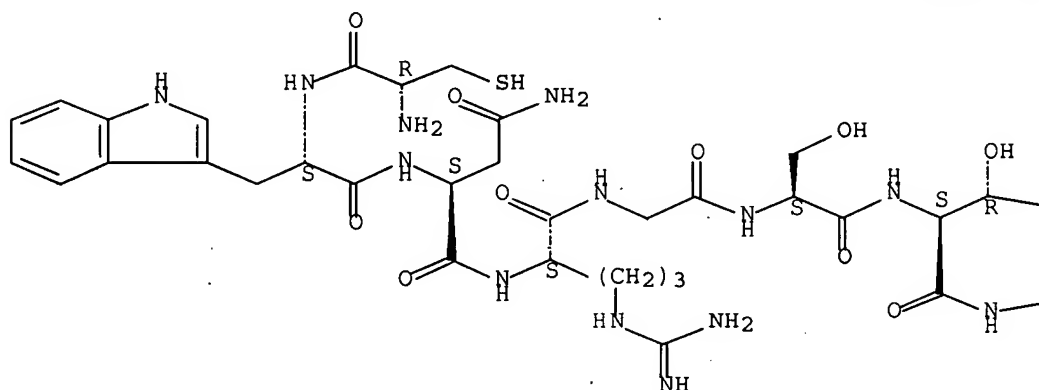
(amino acid sequence, cell type-specific peptide ligand; screening of peptide libraries to identify highly specific ligands and cognate receptors for cell or tissue-specific targeting)

RN 404368-27-0 ZCAPLUS

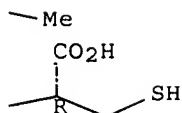
CN L-Cysteine, L-cysteinyl-L-tryptophyl-L-asparaginyl-L-arginylglycyl-L-seryl-L-threonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L95 ANSWER 30 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:163844 ZCAPLUS Full-text

DOCUMENT NUMBER: 136:221696

TITLE: *Bone morphogenetic proteins and their use in bone growth*

INVENTOR(S): Nimni, Marcel E.; Hall, Frederick L.; Wu, Lingtau; Han, Bo; Shors, Edwin C.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 31 pp., Cont.-in-part of U. S. 5,800,811.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 6352972	B1	20020305	US 1997-868452	19970603 <--
US 5800811	A	19980901	US 1995-470837	19950606 <--
WO 9855137	A1	19981210	WO 1998-US11189	19980602 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9877148	A	19981221	AU 1998-77148	19980602 <--
EP 1047442	A1	20001102	EP 1998-925128	19980602 <--
R: DE, FR, GB, IT				
PRIORITY APPLN. INFO.:			US 1995-470837	A2 19950606 <--
			US 1997-868452	A 19970603 <--
			WO 1998-US11189	W 19980602 <--

AB A *bone* morphogenetic fusion protein and a method of preparation of the *bone* morphogenetic fusion protein are disclosed. The *bone* morphogenetic fusion protein comprises a purification tag and a *bone* morphogenetic active fragment. A method of preparing *bone* morphogenetic fusion protein comprises purifying and renaturing *bone* morphogenetic protein to provide an active *bone* morphogenetic fusion protein preparation. Methods of use of the *bone* morphogenetic fusion protein are also provided.

IC ICM A61K038-18

ICS C07K014-51

INCL 514012000

CC 63-3 (Pharmaceuticals)

Section cross-reference(s): 1, 2, 3

ST *bone* morphogenetic fusion protein cloning osteogenesis sequence

IT *Bone* formation

Molecular cloning

Protein sequences

Wound healing

Wound healing promoters

cDNA sequences

(*bone* morphogenetic proteins and their use in *bone* growth enhancement)

IT *Bone* morphogenetic protein 10

*Bone* morphogenetic protein 2

*Bone* morphogenetic protein 3

*Bone* morphogenetic protein 4

Bone morphogenetic protein 5  
 Bone morphogenetic protein 7  
 Bone morphogenetic protein 8  
 Bone morphogenetic proteins  
 Fusion proteins (chimeric proteins)  
 RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); PRP  
 (Properties); THU (Therapeutic use); BIOL (Biological study); PREP  
 (Preparation); USES (Uses)  
 (bone morphogenetic proteins and their use in bone  
 growth enhancement)

IT Human  
 (bone morphogenetic proteins of; bone morphogenetic  
 proteins and their use in bone growth enhancement)

IT Drug delivery systems  
 (implants; bone morphogenetic proteins and their use in  
 bone growth enhancement)

IT Escherichia coli  
 (mol. cloning in; bone morphogenetic proteins and their use  
 in bone growth enhancement)

IT Stem cell  
 (trapping of; bone morphogenetic proteins and their use in  
 bone growth enhancement)

IT Transforming growth factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 ( $\beta$ -; bone morphogenetic proteins and their use in  
 bone growth enhancement)

IT 64134-30-1, Hexahistidine  
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
 (purification tag; bone morphogenetic proteins and their use in  
 bone growth enhancement)

IT 402069-82-3 402069-83-4 402069-84-5 402069-85-6 402069-86-7  
 402069-87-8 402069-88-9, 7: PN: US6352972 SEQID: 25 unclaimed DNA  
 402069-90-3 402069-91-4 402069-93-6 402069-95-8 402069-97-0  
 402069-99-2 402070-01-3 402070-03-5 402070-05-7 402070-07-9  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; bone morphogenetic proteins  
 and their use in bone growth)

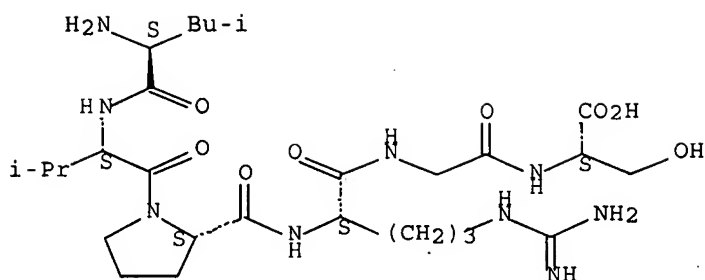
IT 402069-89-0 402069-92-5 402069-94-7 402069-96-9 402069-98-1  
 402070-00-2 402070-02-4 402070-04-6 402070-06-8 402070-08-0  
 402070-09-1 402070-10-4 402070-11-5  
 RL: PRP (Properties)  
 (unclaimed protein sequence; bone morphogenetic proteins and  
 their use in bone growth)

IT 7429-70-1 91859-00-6 92000-76-5 99542-45-7 143740-28-7  
 154485-12-8 158734-08-8 185844-61-5 185844-62-6  
 185844-63-7 185844-64-8 185844-66-0 401928-93-6  
 RL: PRP (Properties)  
 (unclaimed sequence; bone morphogenetic proteins and their  
 use in bone growth)

IT 158734-08-8  
 RL: PRP (Properties)  
 (unclaimed sequence; bone morphogenetic proteins and their  
 use in bone growth)

RN 158734-08-8 ZCAPLUS  
 CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 31 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:142756 ZCAPLUS Full-text

DOCUMENT NUMBER: 136:211909

TITLE: Human kininogen D5 domain polypeptides, protein and cDNA sequence, recombinant production and uses in inhibiting angiogenesis

INVENTOR(S): Mazar, Andrew P.; Juarez, Jose C.

PATENT ASSIGNEE(S): Attenuon, LLC, USA

SOURCE: PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

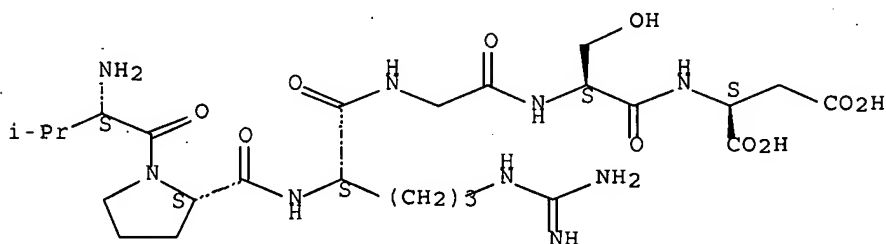
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002014369	A2	20020221	WO 2001-US23185	20010724 <--
WO 2002014369	A9	20030403		
WO 2002014369	A3	20020912		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001077119	A5	20020225	AU 2001-77119	20010724 <--
EP 1305342	A2	20030502	EP 2001-954904	20010724 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004515222	T	20040527	JP 2002-519506	20010724 <--
PRIORITY APPLN. INFO.:				
			US 2000-220194P	P 20000724 <--
			WO 2001-US23185	W 20010724 <--

AB Peptides form the human kininogen D5 domain and fusion peptides thereof having angiogenesis-inhibitory activity. These peptides are used in diagnosis and therapy of diseases associated with endothelial cell migration and proliferation, e.g., the treatment of cancer. The invention further relates to nucleic acid mols. encoding said peptides, antibodies to said peptides and methods for isolating said peptides and cells expressing them. The D5 domain

of human kininogen, has one or more of the following properties: (a) inhibits angiogenesis at a IC50 of at least about 1 CLM; (b) binds to a D5 binding site on an endothelial cell with an affinity characterized by a Kd of about .11 M or lower as measured in a direct binding assay to activated endothelial cells or in a competitive binding assay to purified D5 receptor; (c) activates one or more signaling pathways leading to induction of apoptosis in an endothelial cell; or (d) inhibits a signaling pathway required for maintenance of endothelial cell viability. The invention also relates to host cell, genetic vector and methods for recombinant production of said kininogen D5 domain. The invention also relates to isolating and enriching cells expressing D5 domain binding sites from a cell mixture

IC ICM C07K014-81  
ICS C07K019-00; C12N015-62; C12N015-15; C07K016-38; A61K051-08;  
A61K038-57; G01N033-68; C12N005-08; C12N005-10; A61K047-48  
CC 3-3 (Biochemical Genetics)  
Section cross-reference(s): 1, 6, 13  
IT Bone, disease  
(fracture, treatment of; human kininogen D5 domain polypeptides,  
protein and cDNA sequence, recombinant production and uses in inhibiting  
angiogenesis)  
IT 401895-03-2 401895-04-3  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)  
(linker sequence; human kininogen D5 domain polypeptides, protein and  
cDNA sequence, recombinant production and uses in inhibiting angiogenesis)  
IT 401895-03-2  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)  
(linker sequence; human kininogen D5 domain polypeptides, protein and  
cDNA sequence, recombinant production and uses in inhibiting angiogenesis)  
RN 401895-03-2 ZCAPLUS  
CN L-Aspartic acid, L-valyl-L-prolyl-L-arginylglycyl-L-seryl- (9CI) (CA  
INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 32 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:123987 ZCAPLUS Full-text  
DOCUMENT NUMBER: 137:88982  
TITLE: Steps toward mapping the human vasculature by phage  
display  
AUTHOR(S): Arap, Wadih; Kolonin, Mikhail G.; Trepel, Martin;  
Lahdenranta, Johanna; Cardo-Vila, Marina; Giordano,  
Ricardo J.; Mintz, Paul J.; Ardelt, Peter U.; Yao,  
Virginia J.; Vidal, Claudia I.; Chen, Limor; Flamm,  
Anne; Valtanen, Heli; Weavind, Lisa M.; Hicks,

Marshall E.; Pollock, Raphael E.; Botz, Gregory H.;  
 Bucana, Corazon D.; Koivunen, Erkki; Cahill, Dolores;  
 Troncoso, Patricia; Baggerly, Keith A.; Pentz, Rebecca  
 D.; Do, Kim-Anh; Logothetis, Christopher J.;  
 Pasqualini, Renata

CORPORATE SOURCE: Departments of Genito-Urinary Medical Oncology, Cancer  
 Biology, The University of Texas M.D. Anderson Cancer  
 Center, Houston, TX, USA

SOURCE: Nature Medicine (New York, NY, United States) (  
 2002), 8(2), 121-127

CODEN: NAMEFI; ISSN: 1078-8956

PUBLISHER: Nature America Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The mol. diversity of receptors in human blood vessels remains largely  
 unexplored. The authors developed a selection method in which peptides that  
 home to specific vascular beds are identified after administration of a  
 peptide library. Here the authors report the first in vivo screening of a  
 peptide library in a patient. The authors surveyed 47, 160 motifs that  
 localized to different organs. This large-scale screening indicates that the  
 tissue distribution of circulating peptides is nonrandom. High-throughput  
 anal. of the motifs revealed similarities to ligands for differentially  
 expressed cell-surface proteins, and a candidate ligand-receptor pair was  
 validated. These data represent a step toward the construction of a mol. map  
 of human vasculature and may have broad implications for the development of  
 targeted therapies.

CC 3-1 (Biochemical Genetics)  
 Section cross-reference(s): 13

IT Adipose tissue  
 Blood vessel  
 Bone marrow  
 High throughput screening  
 Human  
 Muscle  
 Organ, animal  
 Peptide library  
 Phage display library  
 Prostate gland  
 Skin

(in vivo selection of peptides that home to specific vascular beds in  
 human after i.v. administration of phage display random peptide  
 library)

IT 556-33-2 3146-40-5 6706-20-3 7451-76-5 10329-76-7 23576-42-3  
 23828-14-0 97812-05-0 105425-96-5 107889-26-9 110767-13-0  
 135756-57-9 146790-65-0 175177-22-7 178440-08-9 220378-50-7  
 248258-18-6 403700-49-2 403700-69-6 403700-70-9 403700-71-0  
 403700-72-1 403700-73-2 403700-74-3 403700-75-4 403700-76-5  
 403700-77-6 403700-78-7 403700-79-8 403700-80-1 403700-81-2  
 403700-82-3 403700-83-4 403700-84-5 403700-85-6 403700-86-7  
 403700-87-8 403700-88-9 403700-89-0 403700-90-3 403700-91-4  
 403700-92-5 403700-93-6 403700-94-7 403700-95-8 403700-96-9  
 403700-97-0 403700-98-1 403700-99-2 403701-00-8 403701-01-9  
 403701-02-0 403701-03-1 403701-04-2 403701-05-3 403701-06-4  
 403701-07-5 403701-08-6 403701-09-7 403701-10-0  
 403701-11-1 403701-12-2 403701-13-3 403701-14-4 403701-15-5  
 403701-16-6 403701-17-7 403701-18-8 403701-19-9 403701-20-2  
 403701-21-3 403701-22-4 403701-23-5 403701-24-6 403701-25-7  
 403701-26-8 403701-27-9 403701-28-0 403701-29-1 403701-30-4  
 403701-31-5 403701-32-6 403701-33-7 403701-34-8 403701-35-9  
 403701-36-0 403701-38-2 403701-39-3 403701-40-6 403701-41-7

403701-42-8	403701-43-9	403701-44-0	403701-45-1	403701-46-2
403701-47-3	403701-48-4	403701-49-5	403701-50-8	403701-51-9
403701-52-0	403701-54-2	403701-55-3	403701-56-4	403701-57-5
403701-58-6	403701-59-7	403701-60-0	403701-61-1	403701-62-2
403701-63-3	403701-64-4	403701-65-5	403701-66-6	403701-67-7
403701-68-8	403701-69-9	403701-70-2	403701-71-3	403701-72-4
403701-73-5	403701-74-6	403701-75-7	403701-76-8	403701-77-9
403701-78-0	403701-79-1	403701-80-4	403701-83-7	403701-84-8
403701-87-1	403701-91-7	403701-92-8	403701-96-2	403702-00-1
403702-05-6	403702-07-8	403702-09-0	403702-11-4	403702-12-5
403702-14-7	403702-15-8	403702-19-2	403702-20-5	403702-21-6
403702-22-7	403702-23-8	403702-24-9	403702-25-0	403702-26-1
403702-27-2	403702-28-3	403702-29-4	403702-30-7	403702-31-8
403702-32-9	403702-33-0	403702-34-1	403702-35-2	403702-36-3
403702-37-4	403702-38-5	403702-39-6	403702-40-9	403702-41-0
403702-42-1	403702-43-2	403702-44-3	403702-45-4	403702-46-5
403702-47-6	403702-48-7	403702-49-8	403702-50-1	403702-51-2
403702-52-3	403702-53-4	403702-54-5	403702-55-6	403702-56-7
403702-57-8	403702-58-9	403702-59-0	403702-60-3	403702-61-4
403702-62-5	403702-63-6	403702-64-7	403702-65-8	403702-66-9
403702-67-0	403702-68-1	403702-69-2	403702-70-5	403702-71-6
403702-72-7	403702-73-8	403702-74-9	403702-75-0	403702-76-1
403702-77-2	403702-78-3	403702-79-4	403702-80-7	403702-81-8
403702-82-9	403702-83-0	403702-84-1	403702-85-2	403702-86-3
403702-87-4	403702-88-5	403702-89-6	403702-90-9	403702-91-0
403702-92-1	403702-93-2	403702-94-3	403702-95-4	403702-96-5
403702-97-6	403702-98-7	403702-99-8	403703-00-4	403703-01-5
403703-02-6	403703-03-7	403703-05-9	403703-07-1	403703-08-2
403703-09-3	403703-10-6	403703-11-7	403703-12-8	403703-13-9
403703-14-0	403703-15-1	403703-16-2		

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (in vivo selection of peptides that home to specific vascular beds in  
 human after i.v. administration of phage display random peptide  
 library)

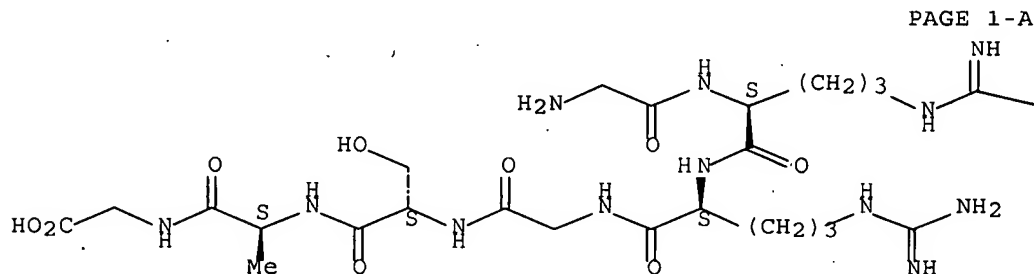
IT 403701-07-5

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (in vivo selection of peptides that home to specific vascular beds in  
 human after i.v. administration of phage display random peptide  
 library)

RN 403701-07-5 ZCAPLUS

CN Glycine, glycyl-L-arginyl-L-arginylglycyl-L-seryl-L-alanyl- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.



—NH<sub>2</sub>

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 33 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2001:798033 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 135:356779  
 TITLE: Artificial antigen-presenting cells for manipulation  
 of antigen-specific T-cells  
 INVENTOR(S): Albani, Salvatore  
 PATENT ASSIGNEE(S): USA  
 SOURCE: PCT Int. Appl., 195 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001080833	A1	20011101	WO 2000-IT161	20000420 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: WO 2000-IT161 20000420 <--

AB The authors discloses the preparation and characterization of artificial antigen-presenting cells. These artificial antigen-presenting cells may be used in isolating and expanding T-cell populations as well as modulating T-cell responses. In several examples, the author discloses methods for the construction of liposomes containing MHC-peptide complexes, accessory mols., co-stimulatory mols., and adhesion mols. In addition, the liposome can contain other mols. irrelevant to T-cell binding or modulation that are used in binding of these artificial antigen-presenting cells to solid support systems that may be used in the retrieval and identification of antigen-specific T-cells. Addnl., the present invention is directed to devices and methods for treating conditions which would benefit from modulation of T-cell response, for example, autoimmune disorders, allergies, cancers, viral infections, and graft rejection.

IC ICM A61K009-127  
 ICS A61K047-48; C07K014-705; G01N033-569

CC 15-10 (Immunochemistry)  
 Section cross-reference(s): 3, 9

IT *Dermatomyositis*  
 (T-cell modulation by artificial antigen-presenting cells in relation to treatment of)

IT *Skin*  
 (dander; T-cell modulation by artificial antigen-presenting cells in relation to treatment for allergy to)



IT 92915-79-2 122630-93-7 137756-45-7 141368-69-6 163362-49-0  
 196497-36-6 255867-37-9 265319-26-4 265319-30-0 325484-40-0  
 372073-85-3 372073-86-4 372073-87-5 372073-88-6  
 372134-96-8 372164-51-7

RL: PRP (Properties)

(unclaimed sequence; artificial antigen-presenting cells for manipulation of antigen-specific T-cells)

IT 372073-87-5

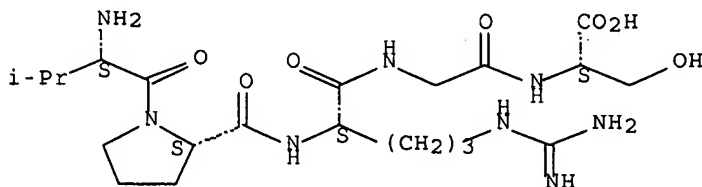
RL: PRP (Properties)

(unclaimed sequence; artificial antigen-presenting cells for manipulation of antigen-specific T-cells)

RN 372073-87-5 ZCAPLUS

CN L-Serine, L-valyl-L-prolyl-L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 34 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:730565 ZCAPLUS [Full-text](#)

DOCUMENT NUMBER: 135:283544

TITLE: Use of insulin for the treatment of cartilaginous disorders

INVENTOR(S): Filvaroff, Ellen H.; Okumu, Franklin W.

PATENT ASSIGNEE(S): Genentech, Inc., USA

SOURCE: PCT Int. Appl., 154 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 155

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072323	A2	20011004	WO 2001-US9230	20010322 <--
WO 2001072323	A3	20020606		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AT 310810	T	20051215	AT 2001-127791	19980916 <--
ES 2253320	T3	20060601	ES 2001-127791	19980916 <--
NZ 528704	A	20050225	NZ 1999-528704	19990308 <--

CA 2450824	A1	20000420	CA 1999-2450824	19991005 <--
EP 1466977	A1	20041013	EP 2004-7618	19991202 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
NZ 523206	A	20041224	NZ 2000-523206	20000211 <--
NZ 523207	A	20041224	NZ 2000-523207	20000211 <--
NZ 523208	A	20041224	NZ 2000-523208	20000211 <--
NZ 523209	A	20041224	NZ 2000-523209	20000211 <--
CA 2481685	A1	20010308	CA 2000-2481685	20000824 <--
CA 2481691	A1	20010308	CA 2000-2481691	20000824 <--
CA 2481731	A1	20010308	CA 2000-2481731	20000824 <--
CA 2481756	A1	20010308	CA 2000-2481756	20000824 <--
CA 2481788	A1	20010308	CA 2000-2481788	20000824 <--
CA 2402191	A1	20011004	CA 2001-2402191	20010322 <--
US 2002058614	A1	20020516	US 2001-815229	20010322 <--
US 6689747	B2	20040210		
EP 1265630	A2	20021218	EP 2001-922571	20010322 <--
EP 1265630	B1	20060607		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003528149	T	20030924	JP 2001-570284	20010322 <--
AT 328605	T	20060615	AT 2001-922571	20010322 <--
ES 2266187	T3	20070301	ES 2001-1922571	20010322 <--
EP 1657251	A2	20060517	EP 2005-24036	20010601 <--
EP 1657251	A3	20060524		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, AL, TR				
AU 758921	B2	20030403	AU 2001-57764	20010801 <--
AU 759004	B2	20030403	AU 2001-57765	20010801 <--
CA 2420193	A1	20020228	CA 2001-2420193	20010823 <--
JP 2004520810	T	20040715	JP 2002-522275	20010823 <--
US 2003073129	A1	20030417	US 2001-946374	20010904 <--
US 2003207803	A1	20031106	US 2001-143026	20011019 <--
US 2003199021	A1	20031023	US 2001-13924	20011025 <--
EP 1397383	A2	20040317	EP 2001-990229	20011213 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AU 772759	B2	20040506	AU 2002-14767	20020201 <--
AU 772723	B2	20040506	AU 2002-14769	20020201 <--
AU 772734	B2	20040506	AU 2002-14771	20020201 <--
AU 778585	B2	20041209	AU 2002-14753	20020201 <--
CA 2449602	A1	20021219	CA 2002-2449602	20020403 <--
WO 2002101069	A2	20021219	WO 2002-US10513	20020403 <--
WO 2002101069	A3	20030904		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002303231	A1	20021223	AU 2002-303231	20020403 <--
EP 1402260	A2	20040331	EP 2002-731246	20020403 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2005500030	T	20050106	JP 2003-503819	20020403 <--
US 2003207351	A1	20031106	US 2002-140473	20020506 <--

US 2003148438	A1	20030807	US 2002-145821	20020514 <--
US 2003170788	A1	20030911	US 2002-145634	20020514 <--
US 2003207371	A1	20031106	US 2002-145749	20020514 <--
US 2003166084	A1	20030904	US 2002-146793	20020515 <--
US 2003134380	A1	20030717	US 2002-147509	20020516 <--
US 2004214269	A1	20041028	US 2002-147518	20020516 <--
US 2003180875	A1	20030925	US 2002-147505	20020517 <--
US 2003199027	A1	20031023	US 2002-152396	20020520 <--
US 2005074837	A1	20050407	US 2002-158788	20020530 <--
US 2003068695	A1	20030410	US 2002-192012	20020709 <--
US 2003068696	A1	20030410	US 2002-192014	20020709 <--
US 2003049743	A1	20030313	US 2002-194394	20020711 <--
US 2003049745	A1	20030313	US 2002-194485	20020711 <--
US 2003064446	A1	20030403	US 2002-194460	20020711 <--
US 2003153037	A1	20030814	US 2002-194457	20020711 <--
US 2003059879	A1	20030327	US 2002-194456	20020712 <--
US 2003064448	A1	20030403	US 2002-194484	20020712 <--
US 2003049747	A1	20030313	US 2002-195899	20020715 <--
US 2003064449	A1	20030403	US 2002-195884	20020715 <--
US 2003063112	A1	20030403	US 2002-195896	20020715 <--
US 2003068705	A1	20030410	US 2002-195886	20020715 <--
US 2003068706	A1	20030410	US 2002-195891	20020715 <--
US 2003073178	A1	20030417	US 2002-195895	20020715 <--
US 2003071834	A1	20030417	US 2002-195898	20020715 <--
US 2003049748	A1	20030313	US 2002-196748	20020716 <--
US 2003049749	A1	20030313	US 2002-196750	20020716 <--
US 2003054461	A1	20030320	US 2002-196751	20020716 <--
US 2003065159	A1	20030403	US 2002-196757	20020716 <--
US 2003068710	A1	20030410	US 2002-196761	20020716 <--
US 2003162250	A1	20030828	US 2002-196747	20020716 <--
US 2003207398	A1	20031106	US 2002-198759	20020718 <--
US 2003215910	A1	20031120	US 2002-199463	20020718 <--
US 2003180881	A1	20030925	US 2002-202475	20020723 <--
US 2003064462	A1	20030403	US 2002-206919	20020726 <--
US 2003064463	A1	20030403	US 2002-206922	20020726 <--
US 2003068756	A1	20030410	US 2002-206912	20020726 <--
US 2003068759	A1	20030410	US 2002-206920	20020726 <--
US 2003068760	A1	20030410	US 2002-206921	20020726 <--
US 2003073183	A1	20030417	US 2002-206917	20020726 <--
US 2003096359	A1	20030522	US 2002-205910	20020726 <--
US 2004048334	A1	20040311	US 2002-205890	20020726 <--
US 2003064468	A1	20030403	US 2002-207922	20020729 <--
US 2003064469	A1	20030403	US 2002-208027	20020729 <--
US 2003068766	A1	20030410	US 2002-207917	20020729 <--
US 2003068769	A1	20030410	US 2002-207920	20020729 <--
US 2003068773	A1	20030410	US 2002-208023	20020729 <--
US 2003068774	A1	20030410	US 2002-208026	20020729 <--
US 2003068776	A1	20030410	US 2002-208030	20020729 <--
US 2003073184	A1	20030417	US 2002-207923	20020729 <--
US 2003073185	A1	20030417	US 2002-207924	20020729 <--
US 2003215912	A1	20031120	US 2002-207915	20020729 <--
US 2004048335	A1	20040311	US 2002-208024	20020729 <--
AU 2002301608	A1	20030306	AU 2002-301608	20021023 <--
AU 2002301732	A1	20030306	AU 2002-301732	20021024 <--
AU 2002301730	A1	20030306	AU 2002-301730	20021025 <--
AU 2002301731	A1	20030306	AU 2002-301731	20021025 <--
AU 2002301722	A1	20030306	AU 2002-301722	20021028 <--
AU 2002301723	A1	20030313	AU 2002-301723	20021028 <--
US 2003120056	A1	20030626	US 2002-289498	20021105 <--
US 2003144498	A1	20030731	US 2002-289527	20021105 <--

US 2004249141	A1	20041209	US 2002-289490	20021105 <--
US 2003211576	A1	20031113	US 2002-298993	20021118 <--
US 2003224984	A1	20031204	US 2002-305654	20021126 <--
AU 2002313838	A1	20030327	AU 2002-313838	20021202 <--
AU 2002330288	A1	20030417	AU 2002-330288	20021202 <--
AU 2002317529	A1	20030410	AU 2002-317529	20021205 <--
AU 2002318894	A1	20030410	AU 2002-318894	20021213 <--
AU 2002323928	A1	20030403	AU 2002-323928	20021220 <--
AU 2003200137	A1	20030417	AU 2003-200137	20030115 <--
AU 2003200204	A1	20030410	AU 2003-200204	20030120 <--
AU 2003200585	A1	20030501	AU 2003-200585	20030213 <--
AU 2003200721	A1	20030501	AU 2003-200721	20030225 <--
AU 2003200722	A1	20030501	AU 2003-200722	20030225 <--
AU 2003200731	A1	20030501	AU 2003-200731	20030225 <--
AU 2003200740	A1	20030612	AU 2003-200740	20030226 <--
AU 2003201315	A1	20030612	AU 2003-201315	20030228 <--
US 2003186306	A1	20031002	US 2003-410374	20030408 <--
AU 2003203679	A1	20030612	AU 2003-203679	20030411 <--
AU 2003203679	B2	20070405		
AU 2003204018	A1	20030612	AU 2003-204018	20030505 <--
AU 2003204357	A1	20030619	AU 2003-204357	20030526 <--
AU 2003248191	A1	20031106	AU 2003-248191	20030919 <--
AU 2003257515	A1	20031120	AU 2003-257515	20031023 <--
AU 2003259607	A1	20031127	AU 2003-259607	20031031 <--
US 2004138101	A1	20040715	US 2003-740098	20031217 <--
US 2004258710	A1	20041223	US 2004-791618	20040302 <--
US 2005019823	A1	20050127	US 2004-931886	20040831 <--
US 2005147609	A1	20050707	US 2004-948780	20040923 <--
US 2005187382	A1	20050825	US 2004-950374	20040923 <--
US 2005153396	A1	20050714	US 2004-955952	20040929 <--
US 2005153348	A1	20050714	US 2004-20604	20041221 <--
US 2005176041	A1	20050811	US 2004-26279	20041230 <--
US 2005214819	A1	20050929	US 2005-30464	20050105 <--
US 2005164266	A1	20050728	US 2005-36582	20050113 <--
US 2005170396	A1	20050804	US 2005-36869	20050114 <--
US 2005202475	A1	20050915	US 2005-38328	20050118 <--
US 2005176046	A1	20050811	US 2005-46650	20050128 <--
US 2005176104	A1	20050811	US 2005-52503	20050204 <--
US 2005136515	A1	20050623	US 2005-56802	20050211 <--
US 2005136475	A1	20050623	US 2005-60652	20050216 <--
US 2005158830	A1	20050721	US 2005-80062	20050314
US 2005214846	A1	20050929	US 2005-117757	20050427 <--
AU 2005205752	A1	20050922	AU 2005-205752	20050831
AU 2005205752	B2	20070607		
AU 2005205754	A1	20050922	AU 2005-205754	20050831
AU 2005205755	A1	20050922	AU 2005-205755	20050831
AU 2005205758	A1	20050922	AU 2005-205758	20050831
US 2007191270	A1	20070816	US 2005-234694	20050922 <--
JP 2007037551	A	20070215	JP 2006-221327	20060814 <--
US 2007049516	A1	20070301	US 2006-538700	20061004 <--
AU 2006252290	A1	20070125	AU 2006-252290	20061229
PRIORITY APPLN. INFO.:			US 2000-192103P	P 20000324 <--
			US 1997-63128P	P 19971024 <--
			US 1998-82704P	P 19980422 <--
			US 1998-83742P	P 19980430 <--
			US 1998-84366P	P 19980505 <--
			US 1998-85339P	A1 19980513 <--
			US 1998-85579P	P 19980515 <--
			US 1998-87106P	P 19980528 <--
			US 1998-88326P	P 19980604 <--

US 1998-88217P	P 19980605 <--
US 1998-88655P	P 19980609 <--
US 1998-89947P	P 19980619 <--
US 1998-90676P	P 19980625 <--
US 1998-91982P	P 19980707 <--
AU 1998-84850	A3 19980714 <--
US 1998-94651P	A1 19980730 <--
US 1998-96012P	P 19980810 <--
US 1998-97022P	P 19980818 <--
US 1998-97954P	P 19980826 <--
US 1998-97974P	P 19980826 <--
US 1998-97979P	P 19980826 <--
AU 1998-93881	A3 19980914 <--
AU 1998-93178	A3 19981002 <--
AU 1999-10703	A3 19981007 <--
US 1998-105169P	P 19981022 <--
US 1998-63561P	P 19981028 <--
AU 1999-11260	A3 19981029 <--
AU 1999-12883	A3 19981029 <--
US 1998-113621P	P 19981223 <--
AU 1999-30721	A3 19990308 <--
US 1999-131293P	P 19990427 <--
US 1999-133459P	P 19990511 <--
US 1999-140650P	P 19990622 <--
US 1999-149395P	P 19990817 <--
US 1999-151689P	P 19990831 <--
AU 1999-55908	A3 19990901 <--
CA 1999-2344465	A3 19991005 <--
AU 2000-17482	A3 19991130 <--
AU 2000-17499	A3 19991202 <--
EP 1999-960644	A3 19991202 <--
AU 2000-28794	A3 20000211 <--
US 2000-195975P	P 20000411 <--
US 2000-196000P	P 20000411 <--
US 2000-196187P	P 20000411 <--
US 2000-198121P	P 20000418 <--
US 2000-198585P	P 20000418 <--
US 2000-199397P	P 20000425 <--
US 2000-199550P	P 20000425 <--
US 2000-201516P	P 20000503 <--
US 2000-204675P	P 20000517 <--
US 2000-227133P	P 20000822 <--
CA 2000-2380355	A3 20000824 <--
US 2000-232887P	P 20000915 <--
US 2000-685823	B1 20001009 <--
US 2000-690189	A3 20001016 <--
JP 2002-576286	A3 20010322 <--
US 2001-815229	A1 20010322 <--
US 2001-816920	B1 20010322 <--
WO 2001-US9230	W 20010322 <--
EP 2001-939834	A3 20010601 <--
EP 2004-5726	A3 20010601 <--
US 2001-880457	A 20010612 <--
US 2001-882636	B1 20010614 <--
US 2001-927796	B1 20010809 <--
WO 2001-US26626	W 20010823 <--
US 2001-990711	A1 20011114 <--
US 2001-992521	B1 20011114 <--
WO 2001-US48938	W 20011213 <--
US 2002-52586	A1 20020115 <--

WO 2002-US10513	W 20020403 <--
US 2002-123155	A1 20020415 <--
US 2002-127825	A1 20020422 <--
US 2002-127966	B1 20020423 <--
US 2002-141703	A1 20020508 <--
US 2002-145627	A1 20020514 <--
US 2002-145751	A 20020514 <--
US 2002-146793	A1 20020515 <--
US 2002-197703	B1 20020717 <--
US 2002-197708	A1 20020717 <--
US 2002-197942	B1 20020718 <--
US 2002-199666	A1 20020718 <--
US 2002-199464	B1 20020719 <--
US 2002-211858	A1 20020802 <--
AU 2003-200137	A3 20030115
AU 2003-261484	A 20031106
US 2003-740098	A1 20031217
US 2004-797366	A1 20040309

AB The present invention relates to methods for the treatment and repair of cartilage, including cartilage damaged by injury or cartilaginous disorders, including arthritis, comprising the administration of insulin and/or insulin variants. Optionally, the administration may be in combination with a cartilage agent (e.g., peptide growth factor, catabolism antagonist, osteo-, synovial, anti-inflammatory factor), in an extended- or sustained-release form. Alternatively, the method provides for the treatment and repair of cartilage damaged by injury or cartilaginous disorders comprising the administration of insulin and/or insulin in combination with standard surgical techniques. Alternatively, the method provides for the treatment and repair of cartilage damaged by injury or cartilaginous disorders comprising the administration of chondrocytes previously treated with an effective amount of insulin and/or insulin variant.

IC ICM A61K038-00

CC 2-6 (Mammalian Hormones)

IT Bone morphogenetic proteins

Growth factors, animal

Interleukin 1 receptor antagonist

Interleukin 1 receptors

Interleukin 10

Interleukin 13

Interleukin 4

Interleukin 6

Interleukin 8

Leukemia inhibitory factor

Tetracyclines

Tumor necrosis factor receptors

Tumor necrosis factors

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(addnl. active ingredient; use of formulations containing insulin or insulin variants for treatment of cartilaginous disorders)

IT 24800-07-5, Insulin (human-A reduced) 27597-36-0, Insulin (human-B reduced) 67413-38-1 364604-37-5 364604-38-6 364604-39-7 364604-40-0 364604-41-1

RL: PRP (Properties)

(unclaimed sequence; use of insulin for the treatment of cartilaginous disorders)

IT 364604-37-5

RL: PRP (Properties)

(unclaimed sequence; use of insulin for the treatment of cartilaginous

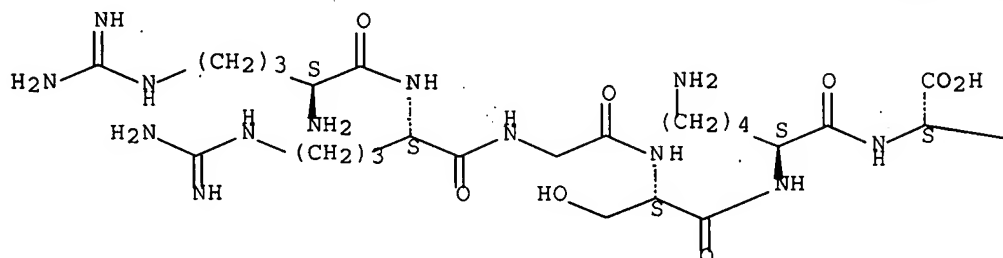
disorders)

RN 364604-37-5 ZCAPLUS

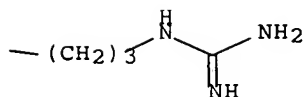
CN L-Arginine, L-arginyl-L-arginylglycyl-L-seryl-L-lysyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L95 ANSWER 35 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2001:703735 ZCAPLUS Full-text  
DOCUMENT NUMBER: 135:269629  
TITLE: Protein fragment complementation assays for the  
detection of biological or drug interactions  
INVENTOR(S): Michnick, Stephen William Watson; Remy, Ingrid  
PATENT ASSIGNEE(S): Odyssey Pharmaceuticals Inc., USA  
SOURCE: U.S., 41 pp., Cont.-in-part of U.S.6,290,964.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 13  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6294330	B1	20010925	US 1998-124850	19980730 <--
CA 2196496	A1	19980731	CA 1997-2196496	19970131 <--
US 6270964	B1	20010807	US 1998-17412	19980202 <--
EP 1605042	A2	20051214	EP 2005-17291	19980202 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CA 2244349	A1	20000130	CA 1998-2244349	19980730 <--
WO 2000007038	A2	20000210	WO 1999-CA702	19990730 <--
WO 2000007038	A3	20000504		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AM, AZ, BY, KG, KZ, MD,  
RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT,  
LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR,  
NE, SN, TD, TG

EP 1027608 A2 20000816 EP 1999-936199 19990730 <--  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

US 2001047526 A1 20011129 US 2001-851084 20010509 <--  
US 6872871 B2 20050329  
US 2005233348 A1 20051020 US 2004-2259 20041203 <--  
US 2005255452 A1 20051117 US 2005-90215 20050328 <--  
AU 2005203580 A1 20050908 AU 2005-203580 20050811 <--

PRIORITY APPLN. INFO.:  
CA 1997-2196496 A 19970131 <--  
US 1998-17412 A2 19980202 <--  
EP 1998-901905 A3 19980202 <--  
CA 1998-2244349 A 19980730 <--  
US 1998-124850 A 19980730 <--  
WO 1999-CA702 W 19990730 <--  
US 2000-499464 A2 20000207 <--  
US 2000-203937P P 20000512 <--  
US 2000-208485P P 20000602 <--  
US 2001-851084 A3 20010509 <--  
US 2001-870018 A3 20010531 <--  
AU 2002-38204 A3 20020506 <--

AB The invention provides a general protein-fragment complementation assays to detect biomol. interactions in vivo and in vitro. The protein-complementation assay/universal reporter system can be used to detect and screen an agonist and an antagonist of a membrane receptor system. The assay can be used to study protein-protein, protein-DNA, protein-RNA, protein-carbohydrate, and protein-small mol. interactions. The assay can be used to screen cDNA libraries for binding of a target protein with unknown proteins or libraries of small organic mols. for biol. activity. Dihydrofolate reductase fragments with leucine zipper motifs were constructed for the reporter system.

IC ICM C12Q001-68  
ICS C12N005-10; C12N001-21; C12N015-11; C12N015-63

INCL 435006000

CC 9-2 (Biochemical Methods)  
Section cross-reference(s): 1, 3, 6, 7

IT Bone morphogenetic protein receptors  
CD30 (antigen)  
CD40 (antigen)  
Chemokine receptors  
Cytokine receptors  
Erythropoietin receptors  
Fas antigen  
Fibroblast growth factor receptors  
G protein-coupled receptors  
Growth factor receptors  
Hepatocyte growth factor receptors  
Hormone receptors  
Insulin-like growth factor receptors  
Interleukin 2 receptors  
Interleukin 3 receptors  
Interleukin 4 receptors  
Interleukin 5 receptors



Interleukin 6 receptors  
 Interleukin 7 receptors  
 Interleukin 8 receptors  
 Interleukin receptors  
 Leukemia inhibitory factor receptors  
 Ligands  
 Nerve growth factor receptors  
 Neurotrophic factor receptors  
 Nuclear receptors  
 Platelet-derived growth factor receptors  
 Proteins, general, biological studies  
 Receptors  
 Steroid receptors  
 Transferrin receptors  
 Tumor necrosis factor receptors  
 Vitamin D receptors  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (protein fragment complementation assays for detection of biol. or drug interactions)

IT **Bone morphogenetic proteins**

Chemokines  
 Fas ligand  
 Hepatocyte growth factor  
 Interleukin 1  
 Interleukin 10  
 Interleukin 11  
 Interleukin 12  
 Interleukin 13  
 Interleukin 14  
 Interleukin 15  
 Interleukin 16  
 Interleukin 17  
 Interleukin 18  
 Interleukin 1 $\alpha$   
 Interleukin 1 $\beta$   
 Interleukin 2  
 Interleukin 3  
 Interleukin 4  
 Interleukin 5  
 Interleukin 6  
 Interleukin 7  
 Interleukin 8  
 Interleukin 9  
 Leukemia inhibitory factor  
 Lymphotoxin  
 Macrophage inflammatory protein 1 $\alpha$   
 Macrophage inflammatory protein 1 $\beta$   
 Monocyte chemoattractant protein-1  
 Natural products  
 Natural products, pharmaceutical  
 Nucleic acids  
 Peptides, biological studies  
 Platelet-derived growth factors  
 Pleiotrophins  
 Retinoids  
 Tumor necrosis factors  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)

(protein fragment complementation assays for detection of biol. or drug interactions)

IT 362614-77-5

RL: PRP (Properties)

(unclaimed sequence; protein fragment complementation assays for the detection of biol. or drug interactions)

IT 362614-77-5

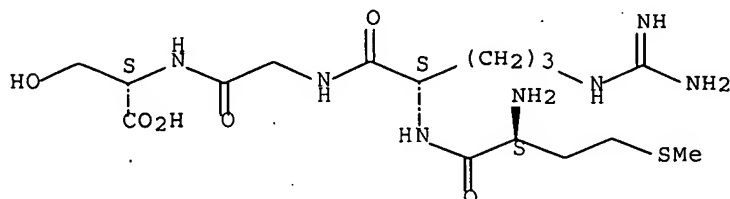
RL: PRP (Properties)

(unclaimed sequence; protein fragment complementation assays for the detection of biol. or drug interactions)

RN 362614-77-5 ZCAPLUS

CN L-Serine, L-methionyl-L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 36 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:55205 ZCAPLUS Full-text

DOCUMENT NUMBER: 134:127572

TITLE: New human VEGF/PDGF like factor, VPLF, and uses in diagnosis and therapy

INVENTOR(S): Shitara, Akinari; Sato, Mitsuo; Sakakibara, Toshihiro; Furuya, Akiko; Hirota, Maiko; Shinkai, Akio; Shibata, Takeshi; Ohta, Norio; Nishikawa, Tetsuo; Isogai, Takao; Sugiyama, Tomoyasu; Ishii, Shizuko

PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan; Helix Research Institute

SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001017188	A	20010123	JP 2000-122994	20000424 <--

PRIORITY APPLN. INFO.: JP 1999-115516 A 19990422 <--

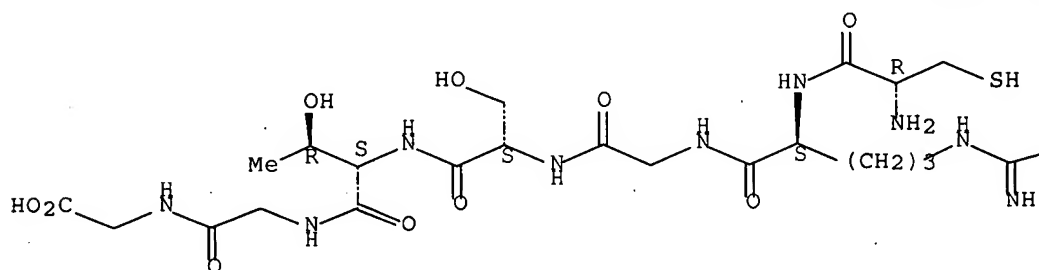
AB A new human VEGF/PDGF like protein factor having proliferative activity on rat smooth muscle cells, recombinant expression, are disclosed. Antibodies, and hybridomas for their production are claimed. Oligonucleotide as probes for hybridization and primers for PCR for detecting its gene expression or abnormality, are also claimed. Use of the gene for diagnosis of and therapy for diseases associated with angiogenesis abnormality, particularly eye disease, joint inflammation, skin disease, abnormality of differentiation and proliferation of smooth muscle cells, kidney mesangial cells, blood stem cells, osteoblast, pancreas  $\beta$  cell abnormality, ischemic disease, or delay of

```

IC      C12N015-09
ICS     A01K067-027; A61K031-711; A61K038-22; A61K039-395; A61K048-00;
        A61P003-10; A61P007-00; A61P007-06; A61P009-10; A61P009-14;
        A61P013-12; A61P015-00; A61P017-00; A61P019-00; A61P019-02;
        A61P019-10; A61P021-00; A61P027-02; A61P029-00
CC      6-3 (General Biochemistry)
        Section cross-reference(s): 2, 3, 13
IT      Skin, disease
        (proliferative; new human VEGF/PDGF like factor, VPLF, and uses in
        diagnosis and therapy)
IT      321656-07-9      321656-08-0      321656-09-1      321656-10-4 321656-11-5
        321656-12-6      321656-13-7      321656-14-8
        RL: PRP (Properties)
        (unclaimed sequence; new human VEGF/PDGF like factor, VPLF, and uses in
        diagnosis and therapy)
IT      321656-11-5
        RL: PRP (Properties)
        (unclaimed sequence; new human VEGF/PDGF like factor, VPLF, and uses in
        diagnosis and therapy)
RN      321656-11-5 ZCAPLUS
CN      Glycine, L-cysteinyl-L-arginylglycyl-L-seryl-L-threonylglycyl- (9CI) (CA
        INDEX NAME)

```

PAGE 1-A



PAGE 1-B

 $\text{NH}_2$

L95 ANSWER 37 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:50820 ZCAPLUS Full-text

DOCUMENT NUMBER: 134:126821

TITLE: Antigenic determinants of antigenic proteins of  
Neisseria meningitidis and their diagnostic,  
prophylactic and therapeutic use

INVENTOR(S): Massignani, Vega; Scarlato, Vincenzo; Scarselli, Maria;  
Galeotti, Cesira; Mora, Mariarosa

PATENT ASSIGNEE(S): Chiron S.p.A., Italy

SOURCE: PCT Int. Appl., 80 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001004316	A2	20010118	WO 2000-IB1026	20000713
WO 2001004316	A3	20010809		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2378547	A1	20010118	CA 2000-2378547	20000713
EP 1196587	A2	20020417	EP 2000-944161	20000713
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
BR 2000012424	A	20020702	BR 2000-12424	20000713
JP 2003504062	T	20030204	JP 2001-509520	20000713
CN 1590404	A	20050309	CN 2004-10048988	20000713
RU 2253678	C2	20050610	RU 2002-103604	20000713
MX 2002PA00463	A	20020702	MX 2002-PA463	20020114
PRIORITY APPLN. INFO.:			GB 1999-16529	A 19990714
			CN 2000-812746	A3 20000713
			WO 2000-IB1026	W 20000713

AB Antigenic determinants of known antigenic proteins of Neisseria meningitidis are characterized. The peptides can be used as diagnostic reagents or as antigens for vaccines and they may be manufactured by expression of a natural or synthetic gene encoding the protein. Homologous sequences and proteins comprising these fragments are also disclosed.

IC ICM C12N015-31

ICS C07K014-22; G01N033-53; C12Q001-68; C07K016-12; A61K039-095;  
A61K039-395; A61K048-00

CC 3-3 (Biochemical Genetics)

Section cross-reference(s): 6, 10, 15, 63

IT 3146-40-5 6511-06-4 13448-27-6 16422-05-2 16716-54-4 17662-44-1  
20274-80-0 21835-35-8 23642-44-6 23828-14-0 26848-21-5  
28636-00-2 32214-51-0 33891-85-9 37460-22-3 39825-68-8  
40211-21-0 47541-65-1 54865-20-2 55488-08-9 57625-91-9  
58872-43-8 66863-82-9 67035-49-8 68375-68-8 72748-97-1  
73027-21-1 78658-41-0 85530-73-0 85807-16-5 85807-50-7  
91408-60-5 92650-48-1 97185-95-0 99092-26-9 106326-02-7  
106326-76-5 110862-98-1 121822-47-7 122061-62-5 125551-93-1  
126855-29-6 127103-05-3 129598-57-8 130488-05-0 130508-66-6

131768-81-5	137507-94-9	138845-33-7	140869-10-9	143689-60-5
146790-81-0	148382-77-8	148777-88-2	152583-45-4	153150-91-5
156826-36-7	158734-09-9	164366-68-1	172924-54-8	
175175-90-3	175176-16-6	176951-60-3	185250-66-2	186698-51-1
194041-51-5	200062-44-8	210880-19-6	210887-92-6	210888-18-9
214076-20-7	216165-54-7	245036-48-0	247073-75-2	249927-00-2
251471-80-4	251471-82-6	260271-23-6	321752-03-8	321862-11-7
321862-18-4	321862-21-9	321862-25-3	321862-26-4	321862-27-5
321866-77-7	321866-79-9	321866-81-3	321866-83-5	321866-85-7
321866-87-9	321866-89-1	321866-91-5	321866-94-8	321866-96-0
321866-98-2	321867-00-9	321867-02-1	321867-04-3	321867-06-5
321867-08-7	321867-09-8	321867-10-1	321867-11-2	321867-12-3
321867-13-4	321867-14-5	321867-15-6	321867-16-7	321867-17-8
321867-18-9	321867-19-0	321867-21-4	321867-23-6	321867-25-8
321867-27-0	321867-28-1	321867-29-2	321867-30-5	321867-31-6
321867-32-7	321867-33-8	321867-34-9	321867-35-0	321867-36-1
321867-37-2	321867-38-3	321867-39-4	321867-40-7	321867-41-8
321867-42-9	321867-43-0	321867-44-1	321867-45-2	321867-46-3
321867-47-4	321867-48-5	321867-49-6	321867-50-9	321867-51-0
321867-52-1	321867-53-2	321867-54-3	321867-55-4	321867-56-5
321867-57-6	321867-58-7	321867-59-8	321867-60-1	321867-61-2
321867-62-3	321867-63-4	321867-64-5	321867-65-6	321867-66-7
321867-67-8	321867-68-9	321867-69-0	321867-70-3	321867-71-4
321867-72-5	321867-73-6	321867-74-7	321867-75-8	321867-76-9
321867-77-0	321867-78-1	321867-79-2	321867-80-5	321867-81-6
321867-82-7	321867-83-8	321867-85-0	321867-86-1	321867-87-2
321867-88-3	321867-89-4	321867-90-7	321867-92-9	321867-94-1
321867-96-3	321867-99-6	321868-00-2	321868-01-3	321868-02-4
321868-04-6	321868-06-8	321868-07-9	321868-08-0	321868-09-1
321868-10-4	321868-11-5	321868-12-6	321868-13-7	321868-14-8
321868-15-9	321868-16-0	321868-17-1	321868-18-2	321868-19-3
321868-20-6	321868-21-7	321868-22-8	321868-23-9	321868-24-0
321868-25-1	321868-26-2	321868-27-3	321868-28-4	321868-29-5
321868-30-8	321868-31-9	321868-32-0	321868-33-1	321868-34-2
321868-35-3	321868-36-4	321868-38-6	321868-40-0	321868-41-1
321868-42-2	321868-44-4	321868-45-5	321868-46-6	321868-50-2
321868-52-4	321868-55-7	321868-57-9	321868-58-0	321868-60-4
321868-62-6	321868-64-8	321868-65-9	321868-66-0	

RL: BAC (Biological activity or effector, except adverse); BSU  
(Biological study, unclassified); PRP (Properties); THU (Therapeutic  
use); BIOL (Biological study); USES (Uses)

(amino acid sequence, antigenic peptide of *Neisseria meningitidis*;  
antigenic determinants of antigenic proteins of *Neisseria meningitidis*  
and their diagnostic, prophylactic and therapeutic use)

IT	321871-53-8	321871-54-9	321871-55-0	321871-56-1	321871-57-2
	321871-58-3	321871-59-4	321871-60-7	321871-61-8	321871-62-9
	321871-63-0	321871-64-1	321871-65-2	321871-66-3	321871-67-4
	321871-68-5	321871-69-6	321871-70-9	321871-71-0	321871-72-1
	321871-73-2	321871-74-3	321871-75-4	321871-76-5	321871-77-6
	321871-78-7	321871-79-8	321871-80-1	321871-81-2	321871-82-3
	321871-83-4	321871-84-5	321871-85-6	321871-86-7	321871-87-8
	321871-88-9	321871-89-0	321871-90-3	321871-91-4	321871-92-5
	321871-93-6	321871-94-7	321871-95-8	321871-96-9	321871-97-0
	321871-98-1	321871-99-2	321872-00-8	321872-01-9	321872-02-0
	321872-03-1	321872-04-2	321872-05-3	321872-06-4	321872-07-5
	321872-08-6	321872-09-7	321872-10-0	321872-11-1	321872-12-2
	321872-13-3	321872-14-4	321872-15-5	321872-16-6	321872-17-7
	321872-18-8	321872-19-9	321872-20-2	321872-21-3	321872-22-4
	321872-23-5	321872-24-6	321872-25-7	321872-26-8	321872-27-9
	321872-28-0	321872-29-1	321872-30-4	321872-31-5	321872-32-6

321872-33-7	321872-34-8	321872-35-9	321872-36-0	321872-37-1
321872-38-2	321872-39-3	321872-40-6	321872-41-7	321872-42-8
321872-43-9	321872-44-0	321872-45-1	321872-46-2	321872-47-3
321872-48-4	321872-49-5	321872-50-8	321872-52-0	321872-53-1
321872-55-3	321872-58-6	321872-60-0	321872-61-1	321872-63-3
321872-67-7	321872-69-9	321872-71-3	321872-73-5	
321872-75-7	321872-76-8	321872-77-9	321872-78-0	321872-79-1
321872-80-4	321872-81-5	321872-82-6	321872-83-7	321872-84-8
321872-85-9	321872-86-0	321872-88-2	321872-89-3	321872-90-6
321872-91-7	321872-92-8	321872-93-9	321872-94-0	321872-95-1
321872-96-2	321872-97-3	321872-98-4	321872-99-5	321873-00-1
321873-01-2	321873-02-3	321873-03-4	321873-04-5	321873-05-6
321873-06-7	321873-07-8	321873-08-9	321873-12-5	321873-13-6
321873-14-7	321873-15-8	321873-16-9	321873-17-0	321873-18-1
321873-19-2	321873-20-5	321873-21-6	321873-22-7	321873-23-8
321873-24-9	321873-25-0	321873-26-1	321873-27-2	321873-28-3
321873-29-4	321873-30-7	321873-31-8	321873-32-9	321873-33-0
321873-34-1	321873-35-2	321873-36-3	321873-37-4	321873-38-5
321873-39-6	321873-40-9	321873-41-0	321873-42-1	321873-43-2
321873-44-3	321873-45-4	321873-46-5	321873-47-6	321873-48-7
321873-49-8	321873-50-1	321873-51-2	321873-52-3	321873-53-4
321873-54-5	321873-55-6	321873-56-7	321873-57-8	321873-58-9
321873-59-0	321873-60-3	321873-61-4	321873-62-5	321873-64-7
321873-66-9	321873-68-1	321873-70-5	321873-72-7	321873-74-9
321873-76-1	321873-78-3	321873-80-7	321873-82-9	321873-84-1
321873-87-4	321873-89-6	321873-91-0	321873-93-2	321873-95-4
321873-97-6	321873-99-8	321874-01-5	321874-03-7	321874-05-9
321874-07-1	321874-09-3	321874-11-7	321874-13-9	321874-15-1
321874-18-4	321874-20-8	321874-22-0	321874-24-2	321874-26-4
321874-28-6	321874-30-0	321874-32-2	321874-34-4	321874-37-7
321874-39-9	321874-41-3	321874-43-5	321874-45-7	321874-47-9

RL: BAC (Biological activity or effector, except adverse); BSU  
(Biological study, unclassified); PRP (Properties); THU (Therapeutic  
use); BIOL (Biological study); USES (Uses)

(amino acid sequence, antigenic peptide of Neisseria meningitidis;  
antigenic determinants of antigenic proteins of Neisseria meningitidis  
and their diagnostic, prophylactic and therapeutic use)

IT	321879-64-5	321879-66-7	321879-69-0	321879-71-4	321879-73-6
	321879-75-8	321879-77-0	321879-79-2	321879-81-6	321879-83-8
	321879-85-0	321879-87-2	321879-89-4	321879-90-7	321879-92-9
	321879-95-2	321879-97-4	321879-99-6	321880-01-7	321880-03-9
	321880-05-1	321880-07-3	321880-09-5	321880-11-9	321880-13-1
	321880-15-3	321880-17-5	321880-19-7	321880-21-1	321880-22-2
	321880-25-5	321880-27-7	321880-29-9	321880-31-3	321880-34-6
	321880-37-9	321880-40-4	321880-42-6	321880-44-8	321880-46-0
	321880-48-2	321880-50-6	321880-53-9	321880-55-1	321880-58-4
	321880-59-5	321880-60-8	321880-62-0	321880-64-2	321880-67-5
	321880-69-7	321880-71-1	321880-73-3	321880-75-5	321880-77-7
	321880-79-9	321880-81-3	321880-84-6	321880-86-8	321880-88-0
	321880-90-4	321880-94-8	321880-95-9	321880-97-1	321880-99-3
	321881-01-0	321881-03-2	321881-05-4	321881-07-6	321881-08-7
	321881-09-8	321881-10-1	321881-11-2	321881-12-3	321881-13-4
	321881-14-5	321881-15-6	321881-16-7	321881-17-8	321881-18-9
	321881-19-0	321881-20-3	321881-21-4	321881-24-7	321881-30-5
	321881-31-6	321881-36-1	321881-37-2	321881-38-3	321881-39-4
	321881-40-7	321881-41-8	321881-43-0	321881-44-1	321881-46-3
	321881-47-4	321881-48-5	321881-49-6	321881-50-9	321881-51-0
	321881-52-1	321881-53-2	321881-58-7	321881-59-8	321881-60-1
	321881-61-2	321881-62-3	321881-63-4	321881-64-5	321881-65-6
	321881-66-7	321884-74-6	321884-75-7	321884-76-8	321884-77-9

321884-78-0	321884-79-1	321884-80-4	321884-81-5	321884-82-6
321884-83-7	321884-84-8	321884-85-9	321884-86-0	321884-87-1
321884-88-2	321884-89-3	321884-90-6	321884-91-7	321884-92-8
321884-93-9	321884-94-0	321884-95-1	321884-96-2	321912-93-0
321913-43-3	321913-46-6	321913-47-7	321913-53-5	321913-55-7
321913-56-8	321913-57-9	321913-58-0	321913-59-1	321913-59-1
321913-63-7	321913-65-9	321913-66-0	321914-05-0	321914-15-2
321914-18-5	321914-19-6	321914-20-9	321914-21-0	321914-21-0
321914-23-2	321914-24-3	321914-25-4	321914-27-6	321914-28-7
321914-29-8	321914-30-1	321914-32-3	321914-34-5	321914-35-6
321914-46-9	321914-48-1	321914-49-2	321914-50-5	321914-53-8
321914-53-8	321914-54-9	321914-58-3	321914-59-4	321914-72-1
321914-74-3	321914-86-7	321914-91-4	321915-03-1	321915-04-2
321915-05-3	321915-06-4	321915-07-5	321915-25-7	321915-32-6
321915-36-0	321915-37-1	321915-38-2	321915-39-3	321915-43-9
321915-44-0	321915-45-1	321915-46-2	321915-47-3	321915-47-3
321915-48-4	321915-94-0	321915-95-1	321916-00-1	321916-01-2
321916-02-3	321916-03-4	321916-04-5	321916-05-6	321916-06-7
321916-08-9	321916-09-0	321916-12-5	321916-13-6	321916-15-8
321916-16-9	321916-18-1	321916-19-2	321916-20-5	321916-21-6
321916-23-8	321916-25-0	321916-30-7	321916-62-5	321916-64-7

RL: BAC (Biological activity or effector, except adverse); BSU  
(Biological study, unclassified); PRP (Properties); THU (Therapeutic  
use); BIOL (Biological study); USES (Uses)

(amino acid sequence, antigenic peptide of Neisseria meningitidis;  
antigenic determinants of antigenic proteins of Neisseria meningitidis  
and their diagnostic, prophylactic and therapeutic use)

IT 158734-09-9 321872-71-3 321880-88-0

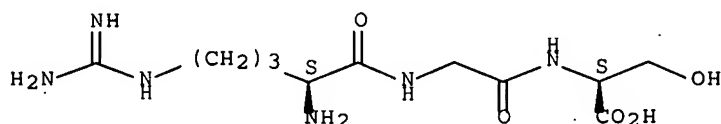
RL: BAC (Biological activity or effector, except adverse); BSU  
(Biological study, unclassified); PRP (Properties); THU (Therapeutic  
use); BIOL (Biological study); USES (Uses)

(amino acid sequence, antigenic peptide of Neisseria meningitidis;  
antigenic determinants of antigenic proteins of Neisseria meningitidis  
and their diagnostic, prophylactic and therapeutic use)

RN 158734-09-9 ZCAPLUS

CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

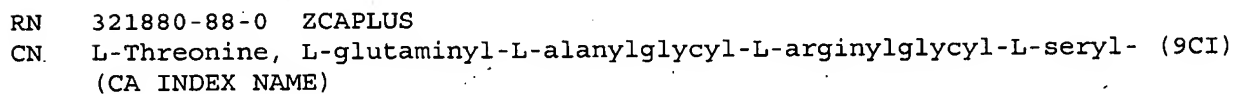
Absolute stereochemistry.



RN 321872-71-3 ZCAPLUS

CN L-Isoleucine, L-alanylglycyl-L-arginylglycyl-L-seryl-L-threonyl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



PAGE 1-A

Chemical structure of a complex peptide derivative, showing multiple amide bonds, chiral centers, and a terminal amino group.

C[C@H](O)[C@@H](C(=O)O)S

PAGE 1-B

108



LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000042213	A1	20000720	WO 2000-US803	20000113 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2360581	A1	20000720	CA 2000-2360581	20000113 <--
EP 1147214	A1	20011024	EP 2000-909899	20000113 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000007532	A	20011120	BR 2000-7532	20000113 <--
JP 2002534132	T	20021015	JP 2000-593770	20000113 <--
US 7070936	B1	20060704	US 2000-482585	20000113 <--
MX 2001PA07099	A	20020327	MX 2001-PA7099	20010712 <--
US 2006089401	A1	20060427	US 2005-261858	20051027 <--
PRIORITY APPLN. INFO.:			US 1999-115643P	P 19990113 <--
			US 2000-482585	A1 20000113 <--
			WO 2000-US803	W 20000113 <--

OTHER SOURCE(S): MARPAT 133:115152

AB A method is provided for identifying inhibitors of protein kinases. Methods are also provided for inhibiting protein kinase activity. Specific non-peptide protein tyrosine kinase inhibitor are provided. The protein kinases produced using the method of the present invention may be used to treat a number of conditions in patients, including cancer, psoriasis, arthrosclerosis, or immune system activity.

IC ICM C12Q001-00

ICS C12Q001-48; G01N033-543

CC 1-12 (Pharmacology)

Section cross-reference(s): 7, 25, 27

IT 91-20-3D, Naphthalene, derivs., biological studies 92-52-4D, Biphenyl, derivs. 95-15-8D, Benzothiophene, derivs. 119-65-3D, Isoquinoline, derivs. 120-18-3, 2-Naphthalenesulfonic acid 120-72-9D, Indole, derivs. 271-89-6D, Benzofuran, derivs. 518-82-1, Emodin 606-25-7, 1-Naphthalenesulfonamide 1576-47-2, 2-Naphthalenesulfonamide 5122-94-1 5122-95-2 7402-93-9 10083-24-6, Piceatannol 10345-06-9 13922-41-3 21521-77-7 32316-92-0 98437-23-1 98437-24-2 107761-24-0, ST 638 205808-04-4 205808-06-6 284660-58-8 284660-59-9 284660-60-2 284660-61-3 284660-62-4 284660-63-5 284660-64-6 284660-65-7 284660-66-8 284660-67-9 284660-68-0 284660-69-1 284660-70-4 284660-71-5 284660-72-6 284660-73-7 284660-74-8 284660-75-9 284660-76-0 284660-77-1 284660-78-2 284660-79-3 284660-80-6 284660-81-7 284660-82-8 284660-85-1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(protein kinase inhibitor design for therapeutic use)

IT 9026-43-1, Protein kinase 79079-06-4, EGF receptor tyrosine kinase 80449-02-1, Protein tyrosine kinase 101463-26-7, Platelet-derived growth factor receptor tyrosine protein kinase 114051-78-4 138238-67-2, Bcr-abl tyrosine kinase 141350-03-0 141436-78-4, Protein

kinase C 142008-29-5, Cyclic AMP-dependent protein kinase 142243-02-5,  
 MAP kinase 144697-17-6, Pp60c-src-protein tyrosine kinase 150428-23-2,  
 CDK kinase

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
 (Biological study); PROC (Process)

(protein kinase inhibitor design for therapeutic use)

IT 284660-59-9 284660-63-5 284660-64-6  
 284660-65-7 284660-66-8

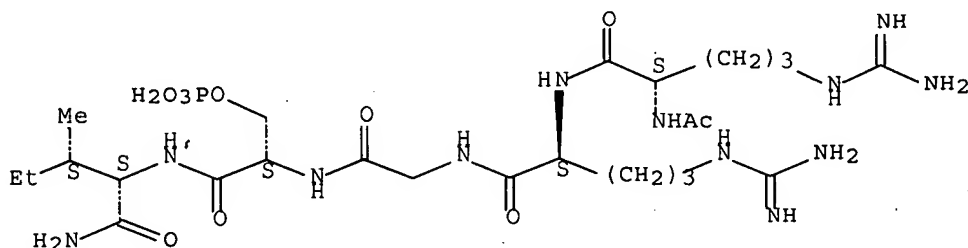
RL: BAC (Biological activity or effector, except adverse); BSU  
 (Biological study, unclassified); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(protein kinase inhibitor design for therapeutic use)

RN 284660-59-9 ZCAPLUS

CN L-Isoleucinamide, N2-acetyl-L-arginyl-L-arginylglycyl-O-phosphono-L-seryl-  
 (9CI) (CA INDEX NAME)

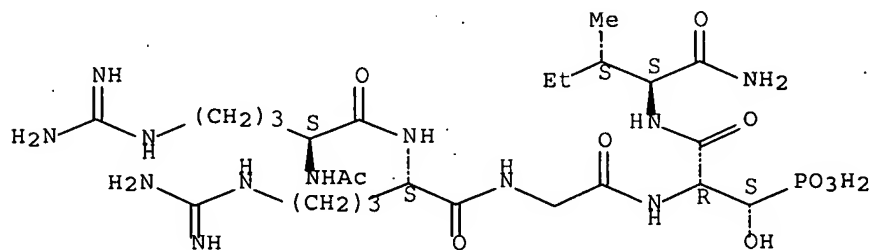
Absolute stereochemistry.



RN 284660-63-5 ZCAPLUS

CN L-Isoleucinamide, N2-acetyl-L-arginyl-L-arginylglycyl- (3S)-3-phosphono-L-  
 seryl- (9CI) (CA INDEX NAME)

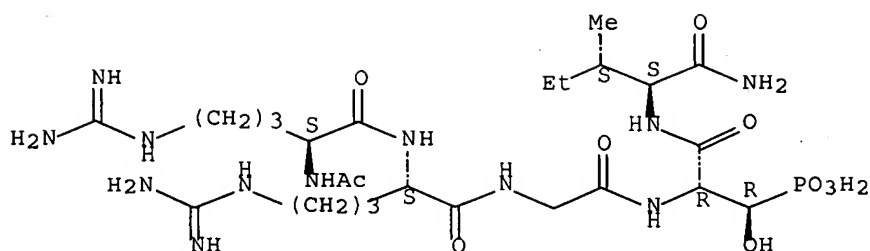
Absolute stereochemistry.



RN 284660-64-6 ZCAPLUS

CN L-Isoleucinamide, N2-acetyl-L-arginyl-L-arginylglycyl- (3R)-3-phosphono-L-  
 seryl- (9CI) (CA INDEX NAME)

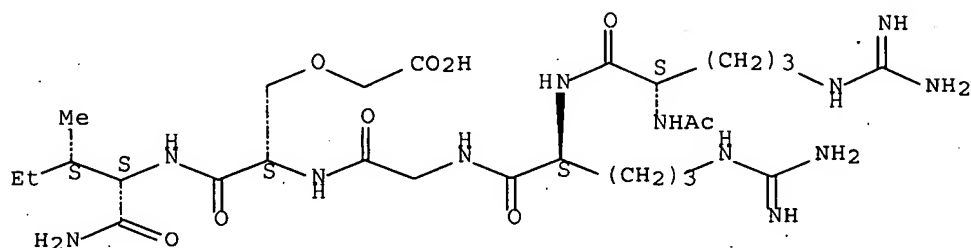
Absolute stereochemistry.



RN 284660-65-7 ZCAPLUS

CN L-Isoleucinamide, N2-acetyl-L-arginyl-L-arginylglycyl-O-(carboxymethyl)-L-seryl- (9CI) (CA INDEX NAME)

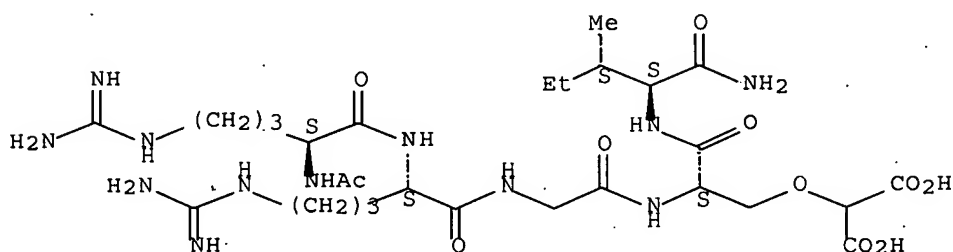
Absolute stereochemistry.



RN 284660-66-8 ZCAPLUS

CN L-Isoleucinamide, N2-acetyl-L-arginyl-L-arginylglycyl-O-(dicarboxymethyl)-L-seryl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 39 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:493164 ZCAPLUS [Full-text](#)

DOCUMENT NUMBER: 133:134163

TITLE: Minor histocompatibility antigens and their use in the diagnosis and treatment of tumors

INVENTOR(S): Dolstra, Harmen; Van de Wiel-Van Kemenade, Petronella; Verlinden, Stefan Frederick Franciscus

PATENT ASSIGNEE(S): Introgene B.V., Neth.  
 SOURCE: Eur. Pat. Appl., 31 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1020519	A1	20000719	EP 1999-200112	19990115 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2359367	A1	20000720	CA 2000-2359367	20000117 <--
WO 2000042181	A1	20000720	WO 2000-NL29	20000117 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1141280	A1	20011010	EP 2000-902202	20000117 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: EP 1999-200112 A 19990115 <--  
 WO 2000-NL29 W 20000117 <--

AB Human minor histocompatibility Ags (mHag) play an important role in the induction of CTL reactivity against tumors after HLA-identical allogeneic bone marrow transplantation (BMT). As most mHag are not tumor specific but also expressed by normal tissues, anti-tumor reactivity is often associated with life-threatening graft-vs.-host disease (GVHD). Here, we describe the use of newly found tumor specific mHag for the development of novel means and methods for the treatment of cancer. In one example we identified a novel mHag, HB-1, that elicits donor-derived CTL reactivity in a B-cell acute lymphoblastic leukemia (B-ALL) patient treated by HLA-matched BMT. We identified the gene encoding the antigenic peptide recognized by a HB-1 specific CTL. Expression of the HB-1 gene was only observed in B-ALL cells and EBV-transformed B cells. Anal. revealed that the HB-1 gene is polymorphic. The restricted expression of the polymorphic HB-1 Ag by B-ALL cells was used in one example of the invention to generate HB-1 specific CTL in vitro using peptide-loaded dendritic cells. HB-1 specific CTL against B-ALL were used to combat B-ALL and were shown to at least in part reduce the growth of said leukemia without evoking GVHD.

IC ICM C12N015-12  
 ICS C07K014-705; C12N015-86; C12N005-10; A61K039-00; A61K031-70;  
 C12N005-08; A61K035-14; C07K016-28; G01N033-574; G01N033-577;  
 A61K039-395; C12Q001-68

CC 15-2 (Immunochemistry)  
 Section cross-reference(s): 3

IT 139087-73-3 285979-90-0 286025-03-4 286025-04-5  
 286025-05-6

RL: PRP (Properties)  
 (unclaimed sequence; minor histocompatibility antigens and their use in the diagnosis and treatment of tumors)

IT 285979-90-0  
 RL: PRP (Properties)  
 (unclaimed sequence; minor histocompatibility antigens and their use in

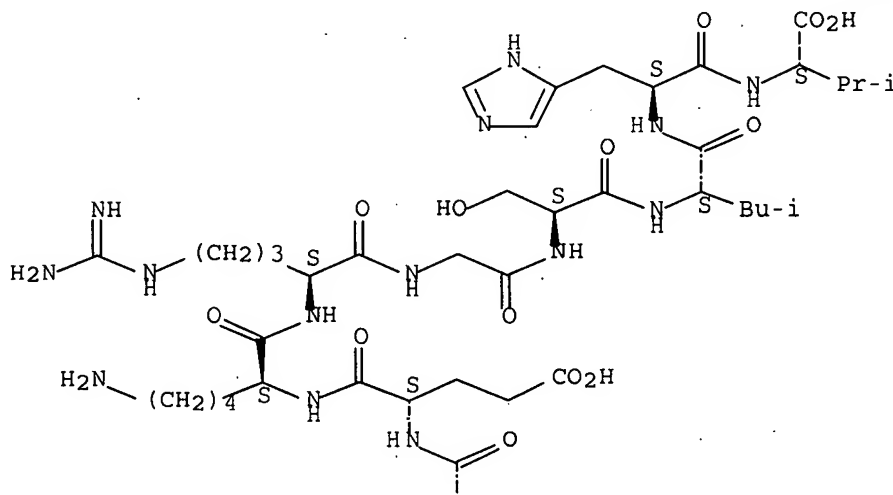
the diagnosis and treatment of tumors)

RN 285979-90-0 ZCAPLUS

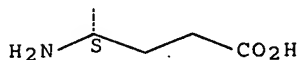
CN L-Valine, L- $\alpha$ -glutamyl-L- $\alpha$ -glutamyl-L-lysyl-L-arginylglycyl-L-seryl-L-leucyl-L-histidyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 40 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2000:155065 ZCAPLUS Full-text  
DOCUMENT NUMBER: 132:304989  
TITLE: Specificity of the wound-induced leucine  
aminopeptidase (LAP-A) of tomato: activity on  
dipeptide and tripeptide substrates  
AUTHOR(S): Gu, Yong-Qiang; Walling, Linda L.  
CORPORATE SOURCE: Department of Botany and Plant Sciences and  
Interdepartmental Program in Genetics, University of  
California, Riverside, CA, 92521-0124, USA  
SOURCE: European Journal of Biochemistry (2000), 267(4),  
1178-1187  
CODEN: EJBACI; ISSN: 0014-2956  
PUBLISHER: Blackwell Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB. Wounding of tomato leaves results in the accumulation of an exoprotease called leucine aminopeptidase (LAP-A) that preferentially hydrolyzes amino acid-p-nitroanilide and - $\beta$ -naphthylamide substrates with N-terminal Leu, Met and Arg residues. To determine the substrate specificity of LAP-A on more natural substrates, the rates of hydrolysis of 60 dipeptide and seven tripeptide substrates were determined. For comparison, the specificities of the porcine and *Escherichia coli* LAPs were evaluated in parallel. Several marked differences in substrate specificities for the animal, plant and prokaryotic LAP enzymes were observed. Substrates with variable N-terminal (P1) residues (Xaa) were evaluated; these substrates had Leu or Gly in the penultimate (P1') position. The plant, animal, and prokaryotic LAPs hydrolyzed dipeptides with N-terminal nonpolar aliphatic (Leu, Val, Ile, and Ala), basic (Arg), and sulfur-containing (Met) residues rapidly, while P1 Asp or Gly were cleaved inefficiently from peptides. Significant differences in the cleavage of dipeptides with P1 aromatic residues (Phe, Tyr, and Trp) were noted. To systematically evaluate the impact of the P1' residue on cleavage of dipeptides, three series of dipeptides (Leu-Xaa, Gly-Xaa, and Arg-Xaa) were evaluated. The P1' residue strongly influenced hydrolysis of dipeptides and the magnitude of its effect was dependent on the P1 residue. P1' Pro, Asp, Lys and Gly slowed the hydrolysis rates of the tomato LAP-A, porcine LAP, and *E. coli* PepA markedly. Anal. six Arg-Gly-Xaa tripeptides showed that more diversity was tolerated in the P2' position. P2' Arg inhibited tripeptide cleavage by all three enzymes, while P2' Asp enhanced hydrolysis rates for the porcine and prokaryotic LAPs.

CC 7-2 (Enzymes)

Section cross-reference(s): 11

IT 556-50-3 686-50-0 869-19-2 1187-50-4, Leu-gly-gly 1188-24-5  
2418-67-9 3303-31-9 20274-92-4 23576-41-2 27169-55-7 55033-29-9  
99896-85-2 158734-09-9

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(specificity of wound-induced leucine aminopeptidase (LAP-A) of tomato)

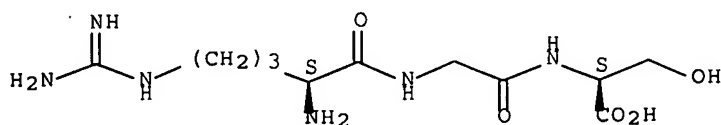
IT 158734-09-9

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(specificity of wound-induced leucine aminopeptidase (LAP-A) of tomato)

RN 158734-09-9 ZCAPLUS

CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 41 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:83091 ZCAPLUS Full-text

DOCUMENT NUMBER: 132:136407

TITLE: Peptides of human T cell reactive feline protein (TRFP)

INVENTOR(S): Gefter, Malcolm L.; Garman, Richard D.; Greenstein, Julia L.; Kuo, Mei-chang; Morville, Malcolm; Briner,

Thomas J.  
 PATENT ASSIGNEE(S): Immulogic Pharmaceutical Corp., USA  
 SOURCE: U.S., 105 pp., Cont.-in-part of U.S. 5,547,669.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 8  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6019972	A	20000201	US 1994-300928	19940902 <--
US 5547669	A	19960820	US 1991-807529	19911213 <--
ZA 9302122	A	19950425	ZA 1993-2122	19930325 <--
AU 9341026	A	19941108	AU 1993-41026	19930414 <--
AU 680820	B2	19970814		
EP 694067	A1	19960131	EP 1993-910592	19930414 <--
EP 694067	B1	20060208		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09501043	T	19970204	JP 1994-523074	19930414 <--
AT 317433	T	20060215	AT 1993-910592	19930414 <--
US 6048962	A	20000411	US 1995-430014	19950427 <--
US 6025162	A	20000215	US 1995-430944	19950428 <--
US 6120769	A	20000919	US 1995-431184	19950428 <--
FI 9504895	A	19951013	FI 1995-4895	19951013 <--
NO 9504095	A	19951213	NO 1995-4095	19951013 <--
NO 316922	B1	20040628		
FI 9603331	A	19960827	FI 1996-3331	19960827 <--
FI 104906	B1	20000428		

PRIORITY APPLN. INFO.:

US 1989-431565	B2	19891103 <--
US 1991-662276	B2	19910228 <--
US 1991-807529	A2	19911213 <--
US 1992-857311	B2	19920325 <--
US 1992-884718	B2	19920515 <--
US 1993-6116	B2	19930115 <--
EP 1993-910592	A	19930414 <--
WO 1993-US3471	W	19930414 <--
US 1994-300928	A3	19940902 <--
FI 1995-4895	A	19951013 <--

AB A substantially pure, covalently linked human T cell reactive feline protein (TRFP) has been isolated from vacuum bag extract obtained by affinity purification of house dust collected from several homes with cats; DNA encoding all or a portion of the TRFP or peptide; compns. containing such a protein or peptide or portions thereof; and antibodies reactive with the TRFP or peptide are disclosed. Also disclosed are recombinant TRFP or peptide; modified or mutated TRFP peptides; their use for diagnostic or therapeutic purposes.

IC ICM A61K039-35  
 ICS C07K007-00; C07K007-06; C07K007-08; C07K014-47

INCL 424185100

CC 15-2 (Immunochemistry)  
 Section cross-reference(s): 3, 63

IT Salivary gland  
 Skin

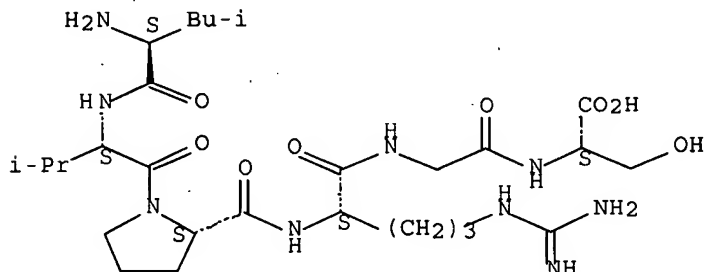
(allergen; peptides of human T cell reactive feline protein or TRFP for diagnosis and therapy of cat allergy)

IT Skin  
 (dander; peptides of human T cell reactive feline protein or TRFP for diagnosis and therapy of cat allergy)

IT 149013-73-0 158734-08-8 197170-32-4

RL: PRP (Properties)  
 (unclaimed protein sequence; peptides of human T cell reactive feline  
 protein (TRFP))  
 IT 158734-08-8  
 RL: PRP (Properties)  
 (unclaimed protein sequence; peptides of human T cell reactive feline  
 protein (TRFP))  
 RN 158734-08-8 ZCAPLUS  
 CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 42 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1999:595206 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 131:223515  
 TITLE: Molecules that home to various selected organs or  
 tissues for therapeutic and diagnostic use  
 INVENTOR(S): Rajotte, Daniel; Pasqualini, Renata; Ruoslahti, Erkki  
 I.  
 PATENT ASSIGNEE(S): The Burnham Institute, USA  
 SOURCE: PCT Int. Appl., 193 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9946284	A2	19990916	WO 1999-US5284	19990310 <--
WO 9946284	A3	20000406		
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6232287	B1	20010515	US 1998-42107	19980313 <--
US 6174687	B1	20010116	US 1999-258754	19990226 <--
CA 2323071	A1	19990916	CA 1999-2323071	19990310 <--
AU 9930783	A	19990927	AU 1999-30783	19990310 <--
AU 762991	B2	20030710		
EP 1062232	A2	20001227	EP 1999-912400	19990310 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002506079	T	20020226	JP 2000-535660	19990310 <--



US 6784153	B1	20040831	US 2000-676475	20000929 <--
US 6610651	B1	20030826	US 2000-722250	20001122 <--
US 2005074812	A1	20050407	US 2003-607595	20030627 <--
US 6933281	B2	20050823		

PRIORITY APPLN. INFO.:

US 1998-42107	A	19980313 <--
US 1999-258754	A	19990226 <--
WO 1999-US5284	W	19990310 <--
US 2000-722250	A3	20001122 <--

OTHER SOURCE(S): MARPAT 131:223515

AB Mols. are provided that selectively home to various normal organs or tissues, including to lung, pancreas, skin, retina, prostate, ovary, lymph node, adrenal gland, liver, and gut. Also provided are mols. that selectively home to tumor-bearing organs or tissues, including to pancreas bearing a pancreatic tumor or to lung bearing a lung tumor. The invention also provides conjugates, comprising an organ- or tissue-homing mol. linked to a moiety. Such a moiety can be e.g. a therapeutic agent or a detectable agent. The invention also provides a method of identifying a membrane dipeptidase (MDP)-binding homing mol. that selectively homes to lung endothelium. The method includes contacting MDP with one or more mols. and determining specific binding of a mol. to the MDP, where the presence of specific binding identifies the mol. as a MDP-binding homing mol. that selectively homes to lung endothelium. Such MDP-binding homing mols. can be linked to a moiety and, when administered to a subject as a conjugate, can selectively direct the moiety to lung endothelium in the subject.

IC C07K007-06; C07K007-08; A61K038-08; A61K038-10; A61K031-195

CC 1-12 (Pharmacology)

Section cross-reference(s): 9, 34

IT Adrenal gland

Adrenal gland, disease

Blood vessel

Digestive tract

Drug screening

Drug targeting

Gene therapy

Liver

Liver, disease

Lung

Lung, disease

Lymph node

Ovary

Ovary, disease

Pancreas

Pancreas, disease

Peptide library

Phage display library

Prostate gland

Protein sequences

Skin

Skin, disease

(mols. that home to various selected organs or tissues for therapeutic and diagnostic use)

IT	243961-35-5	243961-36-6	243961-37-7	243961-38-8	243961-39-9
	243961-40-2	243961-41-3	243961-42-4	243961-43-5	243961-44-6
	243961-45-7	243961-46-8	243961-47-9	243961-48-0	243961-51-5
	243961-52-6	243961-53-7	243961-54-8	243961-55-9	243961-56-0
	243961-57-1	243961-58-2	243961-59-3	243961-60-6	243961-61-7
	243961-63-9	243961-64-0	243961-65-1	243961-66-2	243961-67-3
	243961-68-4	243961-69-5	243961-70-8	243961-71-9	243961-72-0
	243961-73-1	243961-74-2	243961-75-3	243961-76-4	243961-77-5
	243961-78-6	243961-79-7	243961-80-0		

243961-81-1	243961-82-2	243961-83-3	243961-84-4	
243961-85-5	243961-86-6	243961-87-7	243961-88-8	243961-89-9
243961-90-2	243961-91-3	243961-92-4	243961-93-5	243961-94-6
243961-95-7	243961-96-8	243961-97-9	243961-98-0	243961-99-1
243962-00-7	243962-01-8	243962-02-9	243962-03-0	243962-04-1
243962-05-2	243962-06-3	243962-07-4	243962-08-5	243962-09-6
243962-10-9	243962-11-0	243962-12-1	243962-13-2	243962-14-3
243962-17-6	243962-18-7	243962-19-8	243962-20-1	243962-21-2
243962-22-3	243962-34-7			

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mols. that home to various selected organs or tissues for therapeutic and diagnostic use)

IT 131134-25-3 158734-09-9 206558-85-2 243961-49-1  
243962-15-4 243962-16-5

RL: BSU (Biological study, unclassified); BIOL (Biological study) (peptides containing sequence fragment of; mols. that home to various selected organs or tissues for therapeutic and diagnostic use)

IT 243961-78-6 243961-80-0 243961-81-1

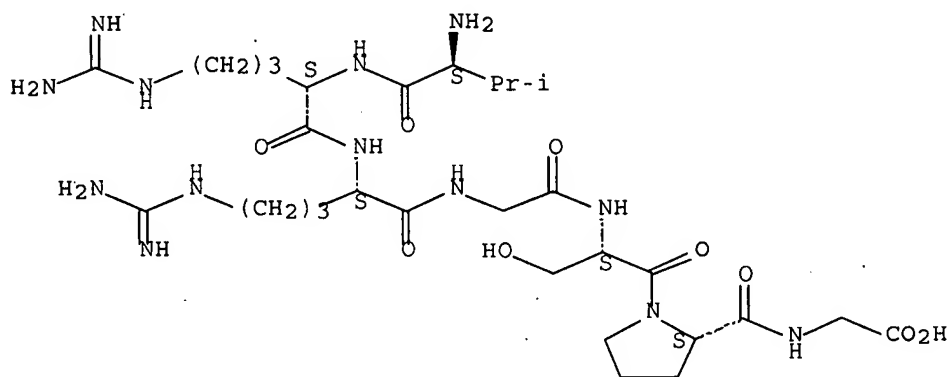
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mols. that home to various selected organs or tissues for therapeutic and diagnostic use)

RN 243961-78-6 ZCAPLUS

CN Glycine, L-valyl-L-arginyl-L-arginylglycyl-L-seryl-L-prolyl- (9CI) (CA INDEX NAME)

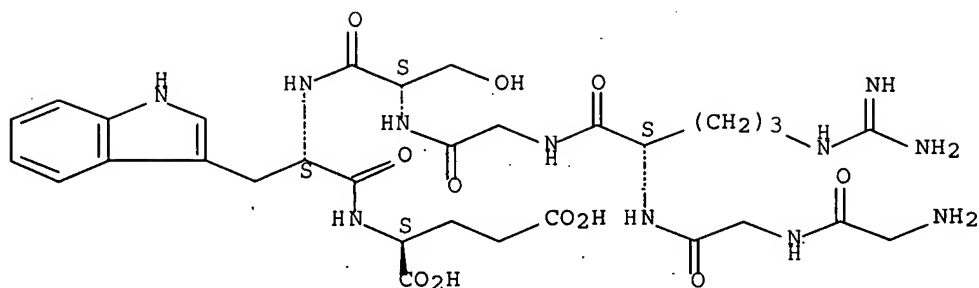
Absolute stereochemistry.



RN 243961-80-0 ZCAPLUS

CN L-Glutamic acid, glycylglycyl-L-arginylglycyl-L-seryl-L-tryptophyl- (9CI) (CA INDEX NAME)

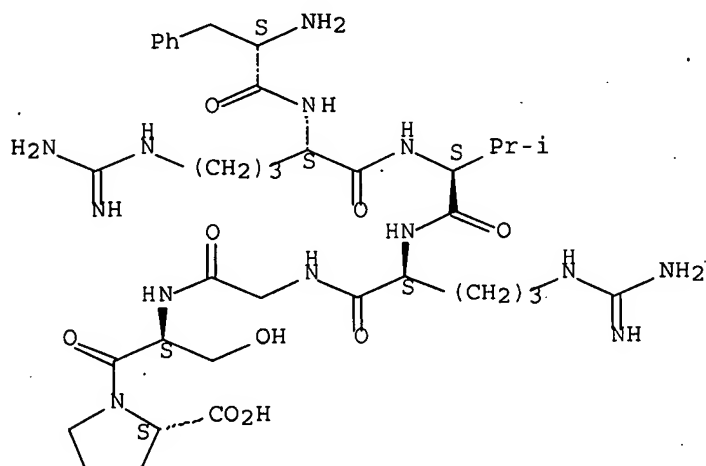
Absolute stereochemistry.



RN 243961-81-1 ZCAPLUS

CN L-Proline, L-phenylalanyl-L-arginyl-L-valyl-L-arginylglycyl-L-seryl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



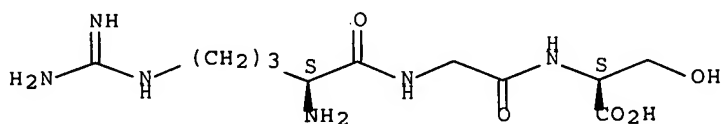
IT 158734-09-9

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(peptides containing sequence fragment of; mols. that home to various  
selected organs or tissues for therapeutic and diagnostic use)

RN 158734-09-9 ZCAPLUS

CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



ACCESSION NUMBER: 1998:804196 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 130:49530  
 TITLE: *Bone morphogenetic proteins and their use in bone growth*  
 INVENTOR(S): Nimni, Marcel E.; Hall, Frederick L.; Wu, Lingtao; Han, Bo; Shors, Edwin C.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: PCT Int. Appl., 64 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9855137	A1	19981210	WO 1998-US11189	19980602 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6352972	B1	20020305	US 1997-868452	19970603 <--
AU 9877148	A	19981221	AU 1998-77148	19980602 <--
EP 1047442	A1	20001102	EP 1998-925128	19980602 <--
R: DE, FR, GB, IT				
PRIORITY APPLN. INFO.:			US 1997-868452	A 19970603 <--
			US 1995-470837	A2 19950606 <--
			WO 1998-US11189	W 19980602 <--
AB	A <i>bone</i> morphogenetic fusion protein and a method of preparation of the <i>bone</i> morphogenetic fusion protein are described. The <i>bone</i> morphogenetic fusion protein comprises a purification tag and a <i>bone</i> morphogenetic active fragment. A method of preparing <i>bone</i> morphogenetic fusion protein comprises purifying and renaturing <i>bone</i> morphogenetic protein to provide an active <i>bone</i> morphogenetic fusion protein preparation. Methods of use of the <i>bone</i> morphogenetic fusion protein are also provided.			
IC	ICM A61K038-18			
	ICS C07H021-04; C12N001-21; C12P021-00; G01N033-53			
CC	9-16 (Biochemical Methods)			
	Section cross-reference(s): 3, 6, 13, 14			
ST	<i>bone</i> morphogenetic protein chimera prepn			
IT	<i>Bone</i> morphogenetic proteins			
	RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (10; <i>bone</i> morphogenetic proteins and their use in <i>bone growth</i> )			
IT	<i>Bone</i> morphogenetic proteins			
	RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (2; <i>bone</i> morphogenetic proteins and their use in <i>bone growth</i> )			
IT	<i>Bone</i> morphogenetic proteins			

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(3; *bone* morphogenetic proteins and their use in *bone growth*)

IT *Bone* morphogenetic proteins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(4; *bone* morphogenetic proteins and their use in *bone growth*)

IT *Bone* morphogenetic proteins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(5; *bone* morphogenetic proteins and their use in *bone growth*)

IT *Bone* morphogenetic proteins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(6; *bone* morphogenetic proteins and their use in *bone growth*)

IT *Bone* morphogenetic proteins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(7; *bone* morphogenetic proteins and their use in *bone growth*)

IT *Bone* morphogenetic proteins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(8; *bone* morphogenetic proteins and their use in *bone growth*)

IT *Bone* morphogenetic proteins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(9; *bone* morphogenetic proteins and their use in *bone growth*)

IT Fusion proteins (chimeric proteins)

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(*bone* morphogenetic protein; *bone* morphogenetic proteins and their use in *bone growth*)

IT *Bone*

*Bone* formation

Cell proliferation

Chelating agents

DNA sequences

Genetic vectors  
Mammal (Mammalia)  
Protein sequences  
Reducing agents  
Schistosoma japonicum

*Skin*

(bone morphogenetic proteins and their use in bone growth)

IT Osteopontin

RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); MFM (Metabolic formation); ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative)  
(bone morphogenetic proteins and their use in bone growth)

IT Fibronectins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
(bone morphogenetic proteins and their use in bone growth)

IT Bone morphogenetic proteins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(bone morphogenetic proteins and their use in bone growth)

IT Collagens, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(bone morphogenetic proteins and their use in bone growth)

IT Gelatins, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
(bone morphogenetic proteins and their use in bone growth)

IT Promoter (genetic element)

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(bone morphogenetic proteins and their use in bone growth)

IT DNA

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(bone morphogenetic proteins and their use in bone growth)

IT Growth, animal

Wound healing

(bone; bone morphogenetic proteins and their use in bone growth)

IT Chromatography

(chelation; bone morphogenetic proteins and their use in bone growth)

IT Conformation

Denaturation

(protein, renaturation; bone morphogenetic proteins and their use in bone growth)

IT Mesenchyme

(stem cell; *bone* morphogenetic proteins and their use in *bone growth*)

IT Transforming growth factors  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
 ( $\beta$ -; *bone* morphogenetic proteins and their use in *bone growth*)

IT Transforming growth factors  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
 ( $\beta$ 1-; *bone* morphogenetic proteins and their use in *bone growth*)

IT 9001-99-4  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (S, purification tag; *bone* morphogenetic proteins and their use in *bone growth*)

IT 134548-22-4P, Glycoprotein (human *bone* morphogenetic 5 subunit protein moiety reduced) 134548-23-5P, Glycoprotein (human *bone* morphogenetic 6 subunit protein moiety reduced) 134548-24-6P, Glycoprotein (human *bone* morphogenetic 7 subunit protein moiety reduced) 146869-98-9P, Osteogenin (human B subunit reduced) 163547-17-9P 217443-72-6P  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (amino acid sequence; *bone* morphogenetic proteins and their use in *bone growth*)

IT 5874-90-8 18635-55-7 26698-64-6 61430-14-6 78641-59-5 99542-45-7  
 154485-12-8 158734-08-8 185844-61-5 185844-62-6  
 185844-63-7 185844-64-8 185844-65-9 185844-66-0  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)  
 (amino acid sequence; *bone* morphogenetic proteins and their use in *bone growth*)

IT 9001-75-6, Pepsin 9001-90-5, Plasmin 9001-98-3, Chymosin 9002-04-4, Thrombin 9002-05-5, Blood-coagulation factor Xa 9002-07-7, Trypsin 9004-06-2, Elastase 9004-07-3, Chymotrypsin 9073-78-3, Thermolysin  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
 (*bone* morphogenetic proteins and their use in *bone growth*)

IT 1306-06-5, Hydroxyapatite  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (*bone* morphogenetic proteins and their use in *bone growth*)

IT 56-81-5, 1,2,3-Propanetriol, biological studies 57-13-6, Urea, biological studies 60-24-2 70-18-8, Reduced glutathione, biological studies 77-86-1, Tris (buffering agent) 7632-05-5, Sodium phosphate 7647-14-5, Sodium chloride, biological studies 9005-32-7, Alginic acid 9016-45-9 27025-41-8, Oxidized glutathione 34346-01-5, Poly(DL-lactic acid-glycolic acid)  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BUU

(Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(bone morphogenetic proteins and their use in bone growth)

IT 9004-67-5, Methylcellulose

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(gel; bone morphogenetic proteins and their use in bone growth)

IT 163547-16-8 217306-12-2 217306-16-6 217306-17-7 217306-18-8  
217443-73-7 217443-74-8 217443-75-9 217443-76-0 217443-80-6

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(nucleotide sequence; bone morphogenetic proteins and their use in bone growth)

IT 7429-70-1 64134-30-1 92000-76-5

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

(purification tag, amino acid sequence; bone morphogenetic proteins and their use in bone growth)

IT 71-00-1D, L-Histidine, poly-, biological studies 50812-37-8, Glutathione S-transferase

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(purification tag; bone morphogenetic proteins and their use in bone growth)

IT 9001-92-7, Proteinase

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(site; bone morphogenetic proteins and their use in bone growth)

IT 158734-08-8

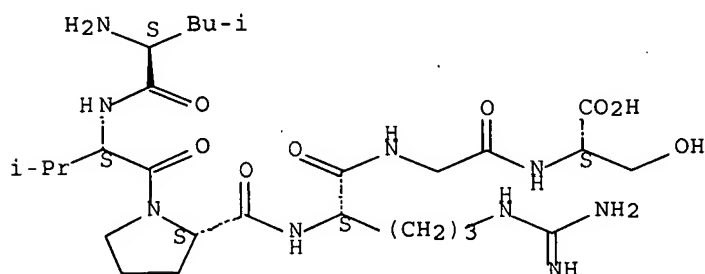
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)

(amino acid sequence; bone morphogenetic proteins and their use in bone growth)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

3.

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



ACCESSION NUMBER: 1998:666318 ZCAPLUS Full-text

DOCUMENT NUMBER: 130:22083

TITLE: In vivo selection of protease cleavage sites from retrovirus display libraries

AUTHOR(S): Buchholz, Christian J.; Peng, Kah-Whye; Morling, Frances J.; Zhang, Jie; Cosset, Francois-Loic; Russell, Stephen J.

CORPORATE SOURCE: Cambridge Centre for Protein Engineering, Medical Research Council Centre, Cambridge, CB2 2QH, UK

SOURCE: Nature Biotechnology (1998), 16(10), 951-954

CODEN: NABIF9; ISSN: 1087-0156

PUBLISHER: Nature America

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Phage display libraries are widely used for selection and optimization of polypeptide ligands or protease substrates. Because they are expressed and amplified in bacterial hosts, phage are not ideal for displaying eukaryotic polypeptides or for probing mammalian cells. As retroviruses do not suffer from these limitations we constructed plasmids encoding replication-competent murine leukemia viruses displaying a virally encoded *epidermal growth factor* (EGF) domain at the N-terminus of the envelope glycoprotein. The EGF-displaying viruses replicated freely on EGF receptor-poor cells without deleting the displayed EGF domain but did not propagate on EGF receptor-rich cells because they were sequestered by the EGF receptors. A retrovirus display library was then generated by diversifying the seven-residue linker between the envelope glycoprotein and the displayed EGF domain. Selective pressure for loss of EGF receptor-binding activity was applied to the library by serial passage on EGF receptor-rich HT1080 cells. The selected viruses propagated on these cells with wild-type efficiencies, a phenotype that was conferred by intracellular cleavage of their displayed linker sequences. The selected linker sequences invariably presented arginine-rich motifs matching the consensus cleavage signal for furin-like proteases. Retrovirus display libraries can be used for the selection of polypeptides interacting with components of living mammalian cells.

CC 7-3 (Enzymes)

Section cross-reference(s): 3

IT 62229-50-9, *Epidermal growth factor*

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(in vivo selection of cellular proteinase cleavage sites from retrovirus display libraries)

IT 216301-14-3 216301-15-4 216301-16-5 216301-17-6  
216301-18-7 216301-19-8

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(linker peptide cleavage site; in vivo selection of cellular proteinase cleavage sites from retrovirus display libraries)

IT 216301-14-3

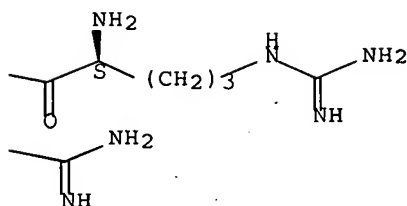
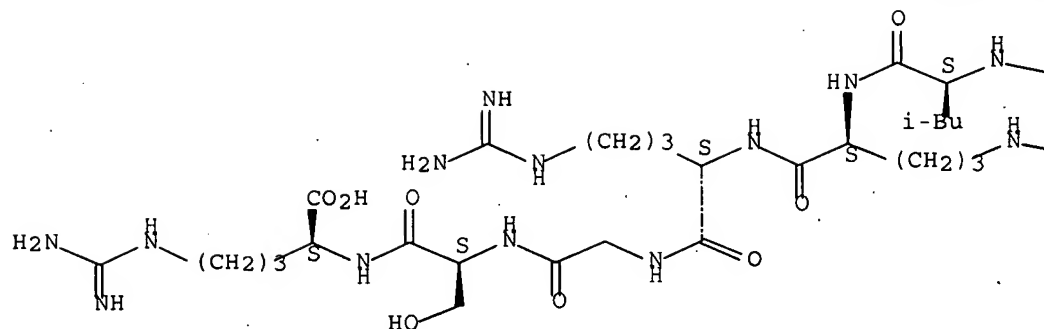
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(linker peptide cleavage site; in vivo selection of cellular proteinase cleavage sites from retrovirus display libraries)

RN 216301-14-3 ZCAPLUS

CN L-Arginine, L-arginyl-L-leucyl-L-arginyl-L-arginylglycyl-L-seryl- (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 45 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:42310 ZCAPLUS Full-text

DOCUMENT NUMBER: 128:119708

TITLE: Heparinized medical devices containing heparin-binding growth factor conjugates

INVENTOR(S): Pierce, Glenn; Baird, J. Andrew

PATENT ASSIGNEE(S): Prizm Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9749434	A2	19971231	WO 1997-US10685	19970620 <--
WO 9749434	A3	19980226		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,			

	GN, ML, MR, NE, SN, TD, TG			
CA 2258154	A1	19971231	CA 1997-2258154	19970620 <--
AU 9736412	A	19980114	AU 1997-36412	19970620 <--
EP 923387	A2	19990623	EP 1997-933150	19970620 <--
EP 923387	B1	20010926		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

AT 206059	T	20011015	AT 1997-933150	19970620 <--
JP 2002515784	T	20020528	JP 1998-503367	19970620 <--

PRIORITY APPLN. INFO.: US 1996-672353 A 19960624 <--  
WO 1997-US10685 W 19970620 <--

AB Medical devices are coated with heparin and a heparin-binding *growth* factor-cytotoxic agent conjugate is bound to the heparin. The devices, including stents, are used to inhibit undesired cell proliferation or kill unwanted cells. A stent coated with heparin and bound with conjugate may be used to inhibit restenosis.

IC ICM A61L

CC 63-7 (Pharmaceuticals)

IT Nucleic acids  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (-binding domains, of glycosaminoglycan-cytocide conjugates; heparinized medical devices containing heparin-binding *growth* factor conjugates with cytotoxic agents to inhibit restenosis)

IT Proteins, specific or class  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (RIP (ribosome-inactivating protein); heparinized medical devices containing heparin-binding *growth* factor conjugates with cytotoxic agents to inhibit restenosis)

IT Artery  
(angioplasty; heparinized medical devices containing heparin-binding *growth* factor conjugates with cytotoxic agents to inhibit restenosis)

IT Artery  
(endarterectomy; heparinized medical devices containing heparin-binding *growth* factor conjugates with cytotoxic agents to inhibit restenosis)

IT Medical goods  
(grafts, synthetic; heparinized medical devices containing heparin-binding *growth* factor conjugates with cytotoxic agents to inhibit restenosis)

IT Fluoropolymers, biological studies  
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(grafts; heparinized medical devices containing heparin-binding *growth* factor conjugates with cytotoxic agents to inhibit restenosis)

IT Growth factors, animal  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(heparin-binding; heparinized medical devices containing heparin-binding *growth* factor conjugates with cytotoxic agents to inhibit restenosis)

IT Molecular cloning  
Protein sequences  
cDNA sequences  
(heparinized medical devices containing heparin-binding *growth* factor conjugates with cytotoxic agents to inhibit restenosis)

IT Cytotoxic agents  
 Fibroblast growth factor receptors  
 Glycosaminoglycans, biological studies  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT Cell proliferation  
 (inhibition of, of vascular smooth muscle; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT Proteins, specific or class  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (saporins; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT Blood vessel  
 (smooth muscle, inhibition of proliferation of; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT Medical goods  
 (stents; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT Vein  
 Vein.  
 (transplant; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT Transplant and Transplantation  
 Transplant and Transplantation  
 (vein; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT 9002-84-0, Polytetrafluoroethylene  
 RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (grafts; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT 9005-49-6, Heparin, biological studies 106096-92-8 106096-93-9,  
 Fibroblast growth factor 2 123584-45-2, Fibroblast growth factor 4 129653-64-1, Fibroblast growth factor 5 130939-41-2, Fibroblast growth factor 6 148348-14-5, Fibroblast growth factor 3 148348-15-6, Fibroblast growth factor 7 151185-16-9, Fibroblast growth factor 9 164003-41-2, Fibroblast growth factor 8  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT 9002-04-4, Thrombin 9002-05-5, Factor xa 9014-74-8, Enterokinase 9025-26-7, Cathepsin D 9047-22-7, Cathepsin B  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (linker for substrate of; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic

agents to inhibit restenosis)

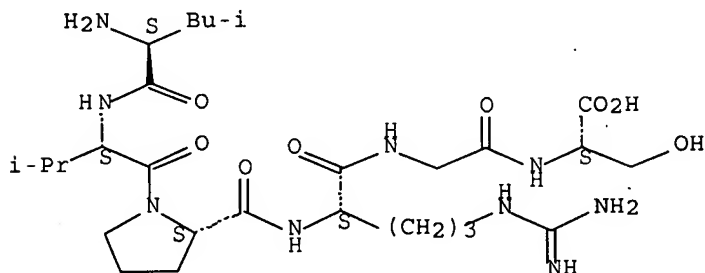
IT 2543-43-3 54017-28-6 91859-00-6 158734-08-8 192805-56-4  
 201533-87-1 201533-88-2  
 RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (linker peptide; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

IT 158734-08-8  
 RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (linker peptide; heparinized medical devices containing heparin-binding growth factor conjugates with cytotoxic agents to inhibit restenosis)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 46 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:667377 ZCAPLUS Full-text

DOCUMENT NUMBER: 127:278451

TITLE: Magic Angle Spinning Nuclear Magnetic Resonance in Solid-Phase Peptide Synthesis

AUTHOR(S): Dhalluin, Christophe; Boutillon, Christophe; Tartar, Andre; Lippens, Guy

CORPORATE SOURCE: Institut Pasteur de Lille, CNRS URA 1309, Lille, 59019, Fr.

SOURCE: Journal of the American Chemical Society (1997), 119(43), 10494-10500  
 CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Solid-phase peptide synthesis of certain sequences (commonly called "difficult sequences") suffers from the occurrence of incomplete coupling reactions and/or partial unmaskings of N $\alpha$ -protection. The underlying reasons for these problems are thought to be a structuration and/or a poor solvation of the growing peptide chains. Few methods are available to study the structural aspects of the peptide chains when still anchored to the solid support. In most cases, they rely on the incorporation of a specific label and examine therefore a modified peptide analog. The complete characterization by homonuclear and heteronuclear magic angle spinning NMR (MAS NMR) of the solid-phase synthesis of a 10-residue peptide is described. A detailed secondary structure determination of the growing peptide on the resin beads, based on

the NOE anal. and the  $^1\text{H}$  and  $^{13}\text{C}$  chemical shift deviations, indicated an extended structure on the whole length of the sequence. At critical synthesis steps, a correlation between the coupling difficulties and the aggregation of the peptide chains was established by chemical measurements and MAS NMR. Upon titration with the hydrogen bond-accepting solvent DMSO, the mobility of the peptide chains on the resin beads increased, resulting in a significant line narrowing of the MAS NMR spectra. This increased mobility is linked to an enhanced peptidyl-resin solvation as reflected by the better coupling efficiency at the critical synthesis steps.

CC 34-3 (Amino Acids, Peptides, and Proteins)

IT 196702-94-ODP, C-terminal resin-bound 196702-95-1DP,  
C-terminal resin-bound 196702-96-2DP, C-terminal resin-bound  
196702-97-3DP, C-terminal resin-bound 196702-98-4DP, C-terminal  
resin-bound

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP  
(Preparation); RACT (Reactant or reagent)

(magic angle spinning NMR of resin-bound intermediates in solid-phase  
peptide synthesis)

IT 196702-94-ODP, C-terminal resin-bound 196702-95-1DP,  
C-terminal resin-bound 196702-96-2DP, C-terminal resin-bound

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP  
(Preparation); RACT (Reactant or reagent)

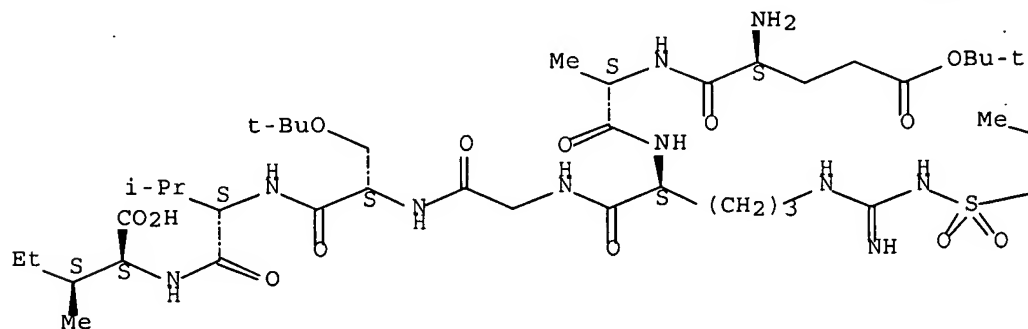
(magic angle spinning NMR of resin-bound intermediates in solid-phase  
peptide synthesis)

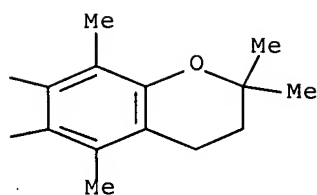
RN 196702-94-0 ZCAPLUS

CN L-Isoleucine, L- $\alpha$ -glutamyl-L-alanyl-N5-[[[(3,4-dihydro-2,2,5,7,8-  
pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]-L-  
ornithylglycyl-O-(1,1-dimethylethyl)-L-seryl-L-valyl-,  
1-(1,1-dimethylethyl) ester (9CI). (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

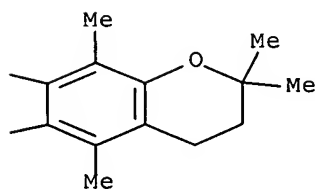
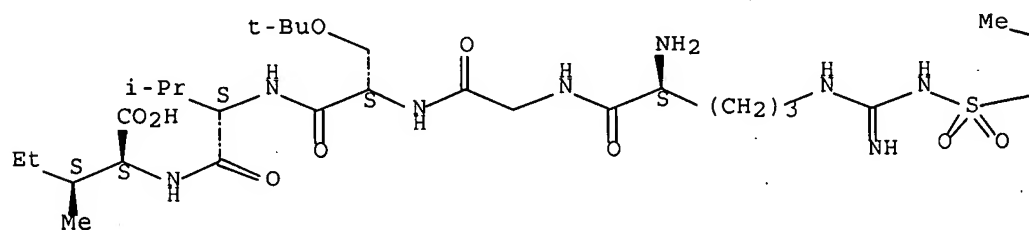




RN 196702-95-1 ZCAPLUS

CN L-Isoleucine, N5-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]-L-ornithylglycyl-O-(1,1-dimethylethyl)-L-seryl-L-valyl- (9CI) (CA INDEX NAME)

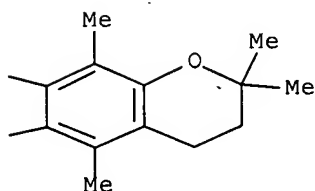
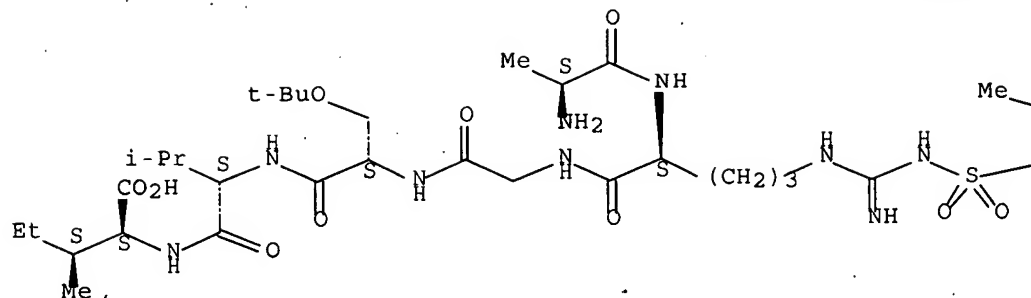
Absolute stereochemistry.



RN 196702-96-2 ZCAPLUS

CN L-Isoleucine, L-alanyl-N5-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]-L-ornithylglycyl-O-(1,1-dimethylethyl)-L-seryl-L-valyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 47 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1997:105210 ZCAPLUS Full-text  
 DOCUMENT NUMBER: 126:113714  
 TITLE: Transforming growth factor- $\beta$  fusion proteins and their use in wound healing  
 INVENTOR(S): Hall, Frederick L.; Nimni, Marcel E.; Tuan, Tai-Lan; Wu, Lintao; Cheung, David T.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: PCT Int. Appl., 58 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9639430	A1	19961212	WO 1996-US8973	19960605 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
US 5800811	A	19980901	US 1995-470837	19950606 <--



AB Disclosed is a method of preparing a fusion protein comprising a purification tag,  $\geq 1$  proteinase site, an extracellular matrix binding site, and an active transforming growth factor  $\beta$  (TGF- $\beta$ ) fragment. The method also includes purifying and renaturing TGF- $\beta$  protein to provide an active TGF- $\beta$  fusion protein preparation. Methods of using TGF- $\beta$  fusion protein are also provided. Preparation of a few fusion proteins consisting of C-terminal 112 amino acids of human TGF- $\beta 1$  was shown. Biol. activities of TGF- $\beta$  fusion proteins and use of the proteins as wound healing agents were also described.

ICS C12N015-62

Section cross-reference(s): 1, 3

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

IT 158734-08-8

(proteinase site peptide; preparation of transforming growth factor- $\beta$  fusion proteins and use in wound healing)

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Chemical structure of compound 10, showing a pyrrolidine ring substituted with a thioamide group ( $\text{NH-C(=S)-NH-Pr}^i$ ), a thioether group ( $\text{S-C(=S)-NH-C(=S)-NH-CH}_2\text{CH}_2\text{CO}_2\text{H}$ ), and a thioester group ( $\text{S-C(=S)-NH-C(=S)-NH-CH}_2\text{CH}_2\text{CO}_2\text{H}$ ).

ACCESSION NUMBER: 1995:991212 ZCAPLUS Full-text

TITLE: Isolation of a tripeptide from a random phage peptide library that inhibits P1,P4-diadenosine 5'-tetraphosphate binding to its receptor

SOURCE: Biochemistry (1996), 35(1), 197-201  
CODEN: BICHAW; ISSN: 0006-2960

PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Extracellular P1,P4-diadenosine 5'-tetrphosphate (Ap4A) has been implicated as a modulator of cell stress. The authors have previously demonstrated specific receptors for Ap4A at the surface of cardiac myocytes. In addition, the authors have isolated a monoclonal antibody (mAb TL4) that recognized the Ap4A receptor and inhibited binding of Ap4A to its receptor. As part of the effort to characterize the Ap4A receptor building domain, the authors screened a random phage peptide library with mAb TL4. After affinity purification of specifically bound phage, the authors isolated 38 individual phage clones. Twenty-eight of these clones bound mAb TL4 in ELISA and dot blot analyses. Twenty-two of the twenty-eight individual clones contained inserts with an RGS tripeptide sequence. Synthetic RGS peptide specifically inhibits the binding of mAb TL4 to its membrane receptor. Furthermore, the RGS peptide also inhibits [3H]Ap4A binding to its receptor. These data are consistent with the RGS peptide mimicking part of the mAb TL4 recognition site on the Ap4A receptor. The RGS peptide may be used to help characterize the Ap4A receptor binding domain and to help determine the physiol. significance of the interaction between Ap4A and its receptor.

CC 6-3 (General Biochemistry)

IT 158734-09-9

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(RGS tripeptide from random phage peptide library inhibits  
P1,P4-diadenosine 5'-tetrphosphate (Ap4A) binding to receptor)

IT 158734-09-9

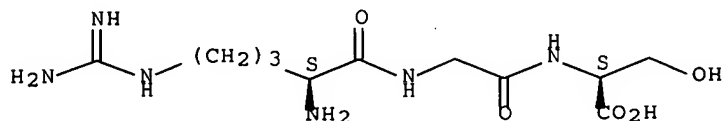
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(RGS tripeptide from random phage peptide library inhibits  
P1,P4-diadenosine 5'-tetrphosphate (Ap4A) binding to receptor)

RN 158734-09-9 ZCAPLUS

CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 49 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:570940 ZCAPLUS Full-text

DOCUMENT NUMBER: 122:307396

TITLE: Receptor mediated label transfer assay

INVENTOR(S): Beutler, Bruce A.; Poltorak, Alexander; Peppel, Karsten

PATENT ASSIGNEE(S): Board of Regents, University of Texas System, USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

```

-----
WO 9506257      A1      19950302      WO 1994-US9553      19940823 <--
W:  AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB,
    GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW,
    NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN
RW:  KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC,
    NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
AU 9476031      A      19950321      AU 1994-76031      19940823 <--
PRIORITY APPLN. INFO.:      US 1993-111075      A 19930823 <--
                                WO 1994-US9553      W 19940823 <--

```

AB A new method for the detection of subpicogram amts. of soluble receptors and receptor-ligands is disclosed. The method is exceedingly sensitive and has been used to detect tumor necrosis factor (TNF) in plasma samples by using a 131I-labeled recombinant TNF receptor capture ligand that is crosslinked to the TNF, then isolated and detected by PAGE. The technique takes advantage of the resolving power of PAGE combined with specificity imparted by receptor-ligand interaction. Limitations imposed only by the affinity constant of interaction between ligand and receptor are circumvented by forming a covalent bond between the receptor and the ligand. The assay is in principle applicable to the detection of many protein hormones for which soluble receptors exist and is particularly suited to detection of proteins that engage multiple receptor subunits. The methods represent a major improvement over conventional methods for the assay of trace proteins and specific detection of only a few hundred thousand active mols.

IC ICM G01N033-68  
ICS G01N033-566; G01N033-531

CC 2-1 (Mammalian Hormones)  
Section cross-reference(s): 3, 9, 14

IT Animal growth regulators  
Hormones  
Interferons  
Ligands  
Lymphokines and Cytokines  
Proteins, biological studies  
Receptors

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(receptor-mediated label transfer assay)

IT 9002-72-6, Growth hormone  
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(receptor-mediated label transfer assay)

IT 50-00-0, Formaldehyde, biological studies 111-30-8, Glutaraldehyde  
30525-89-4, Paraformaldehyde 68528-80-3, Disuccinimidyl suberate  
158734-08-8 163517-20-2 163517-21-3 163517-22-4  
163517-23-5 163517-24-6  
RL: ARU (Analytical role, unclassified); THU (Therapeutic use);  
ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(receptor-mediated label transfer assay)

IT 158734-08-8  
RL: ARU (Analytical role, unclassified); THU (Therapeutic use);  
ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(receptor-mediated label transfer assay)

RN 158734-08-8 ZCAPLUS

CN L-Serine, L-leucyl-L-valyl-L-prolyl-L-arginylglycyl- (CA INDEX NAME)

Absolute stereochemistry.



peptide and 158734-08-8DP, oligomeric fusion products containing vasoactive intestinal peptide and 158734-09-9DP, oligomeric fusion products containing vasoactive intestinal peptide and 158734-10-2DP, oligomeric fusion products containing vasoactive intestinal peptide and 158734-11-3DP, oligomeric fusion products containing vasoactive intestinal peptide and RL: BPN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); PREP (Preparation)

(manufacture of vasoactive intestinal peptide as an oligomer linked by labile peptides in a fusion protein)

IT 158734-09-9DP, oligomeric fusion products containing vasoactive intestinal peptide and

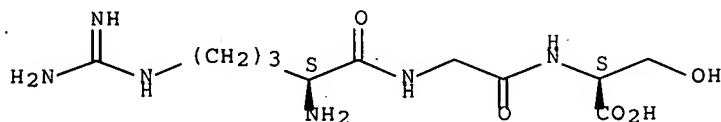
RL: BPN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); PREP (Preparation)

(manufacture of vasoactive intestinal peptide as an oligomer linked by labile peptides in a fusion protein)

RN 158734-09-9 ZCAPLUS

CN L-Serine, L-arginylglycyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L95 ANSWER 51 OF 51 ZCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:421379 ZCAPLUS Full-text

DOCUMENT NUMBER: 113:21379

TITLE: Persistent spreading of ligament cells on osteopontin/  
bone sialoprotein-I or collagen enhances  
tolerance to heat shock

AUTHOR(S): Sauk, John J.; Van Kampen, Craig L.; Norris, Kathleen;  
Moehring, Jennifer; Foster, Ruth A.; Somerman, Martha  
J.

CORPORATE SOURCE: Dent. Sch., Univ. Maryland, Baltimore, MD, 21201, USA

SOURCE: Experimental Cell Research (1990), 188(1),  
105-10

CODEN: ECREAL; ISSN: 0014-4827

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Fibronectin (FN), bone sialoprotein-I (BSP-I), type I collagen, and a number of synthetic peptides containing the integrin attachment sequence (RDG) were evaluated for their ability to affect stress tolerance in osteoligament cells (OL). The attachment and spreading of OL cells was determined and survival from heat shock was evaluated by known methods. These studies showed that FN, BSP-I, and synthetic RGD peptides enhance attachment of OL cells. Increased survival from heat was limited to cells spread on fibronectin, BSP-I, and type I collagen. OL cells that persistently spread on BSP-I and type I collagen had more survivors than cells demonstrating transient spreading on FN. These studies indicate that (1) cell spreading is a prerequisite for stress tolerance and (2) enhanced stress tolerance is mediated by protein sequences other than those immediately surrounding the RGD sites in native proteins.

CC 13-6 (Mammalian Biochemistry)

IT 91037-66-0, VTGRGDSPASSKPIC 127780-09-0, VTGRGSPAC

127780-11-4, EDGRDITYRAVEDEK 127780-12-5, QVTRGDVFTMPEDEK 127780-13-6,  
PDGRGDSLAYGLRSK

RL: BIOL (Biological study)  
(ligament cell attachment and spreading on, heat shock tolerance response to)

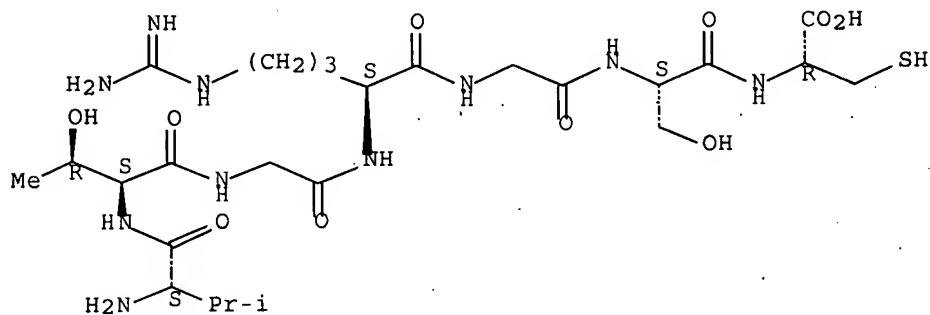
IT 127780-09-0, VTGRGSPAC

RL: BIOL (Biological study)  
(ligament cell attachment and spreading on, heat shock tolerance  
response to)

RN 127780-09-0 ZCAPLUS

CN L-Cysteine, N-[N-[N-[N2-[N-(N-L-valyl-L-threonyl)glycyl]-L-arginyl]glycyl]-L-seryl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d his full

(FILE 'HOME' ENTERED AT 10:48:02 ON 05 SEP 2007)

FILE 'ZCAPLUS' ENTERED AT 10:49:30 ON 05 SEP 2007

E US2005-534355/APPS

L1 2 SEA ABB=ON PLU=ON US2005-534355/AP  
D SCA  
SEL RN

FILE 'REGISTRY' ENTERED AT 10:50:27 ON 05 SEP 2007

L2 1 SEA ABB=ON PLU=ON 158734-09-9  
L3 10 SEA ABB=ON PLU=ON (158734-09-9/BI OR 25265-71-8/BI OR  
25265-75-2/BI OR 56-65-5/BI OR 57-55-6/BI OR 64-17-5/BI OR  
67-63-0/BI OR 71-23-8/BI OR 7440-70-2/BI OR 9003-11-6/BI)  
D SCA L2

FILE 'STNGUIDE' ENTERED AT 10:53:01 ON 05 SEP 2007

FILE 'REGISTRY' ENTERED AT 11:01:37 ON 05 SEP 2007

E A/FS

L4 0 SEA ABB=ON PLU=ON L3 AND SEQUENCE/FS

FILE 'ZCAPLUS' ENTERED AT 11:05:08 ON 05 SEP 2007

L5 10 SEA ABB=ON PLU=ON L2  
D SCA

FILE 'REGISTRY' ENTERED AT 11:09:37 ON 05 SEP 2007

L6 186 SEA ABB=ON PLU=ON ^.{0-3}RGS.{0-3}^/SQSP  
L7 0 SEA ABB=ON PLU=ON L6 AND L2  
L8 186 SEA ABB=ON PLU=ON L6 AND SQL<10  
L9 0 SEA ABB=ON PLU=ON L6 AND SQL<4  
L10 11 SEA ABB=ON PLU=ON L6 AND SQL<5  
SEL RN L2  
L11 0 SEA ABB=ON PLU=ON 158734-09-9/CRN  
L12 STR 158734-09-9  
D L12  
L13 0 SEA FAM SAM L12  
L14 1 SEA FAM FUL L12

FILE 'ZCAPLUS' ENTERED AT 11:16:04 ON 05 SEP 2007

L15 257 SEA ABB=ON PLU=ON L6  
L16 141667 SEA ABB=ON PLU=ON COSMET?/CC  
L17 0 SEA ABB=ON PLU=ON L15 AND L16  
L18 175128 SEA ABB=ON PLU=ON ?COSMET?/SC,SX  
L19 2257205 SEA ABB=ON PLU=ON PHARM?/CC,SX,SC  
L\*\*\* DEL 85 S L!5 AND (L16 OR L18 OR L19)  
L20 115 SEA ABB=ON PLU=ON L15 AND (L16 OR L18 OR L19)  
L21 10 SEA ABB=ON PLU=ON L2  
L22 3 SEA ABB=ON PLU=ON L21 AND L16  
L23 3 SEA ABB=ON PLU=ON L21 AND L18  
L24 5 SEA ABB=ON PLU=ON L21 AND L19  
L25 6 SEA ABB=ON PLU=ON (L22 OR L23 OR L24)  
L26 1741414 SEA ABB=ON PLU=ON (THU OR BAC OR PKT OR PAC OR DMA)/RL  
L27 4 SEA ABB=ON PLU=ON L2 (L) L26  
L28 6 SEA ABB=ON PLU=ON L25 OR L27  
L29 4 SEA ABB=ON PLU=ON L5 NOT L28  
L30 85846 SEA ABB=ON PLU=ON ?COSMET?/BI

L31	215552	SEA ABB=ON	PLU=ON	?DERM?/BI
L32	315606	SEA ABB=ON	PLU=ON	?SKIN?/BI
L33	907	SEA ABB=ON	PLU=ON	?CELLULIT?/BI
L34	206046	SEA ABB=ON	PLU=ON	AGING?/BI OR ANTIAGING?/BI
L35	1	SEA ABB=ON	PLU=ON	L15 AND L30
		D SCA		
L36	16	SEA ABB=ON	PLU=ON	L15 AND L31
L37	22	SEA ABB=ON	PLU=ON	L15 AND L32
L38	0	SEA ABB=ON	PLU=ON	L15 AND L33
L39	1	SEA ABB=ON	PLU=ON	L15 AND L34
		D SCA		
L40	65	SEA ABB=ON	PLU=ON	L15 (L) L26
L41	12	SEA ABB=ON	PLU=ON	L40 AND (L30 OR L31 OR L32 OR L33 OR L34)
L42	2	SEA ABB=ON	PLU=ON	L15 AND L18
		D SCA		
L43	49	SEA ABB=ON	PLU=ON	L19 AND L40
L44	16	SEA ABB=ON	PLU=ON	L40 NOT L43
L45	33	SEA ABB=ON	PLU=ON	(L36 OR L37 OR L38 OR L39)
L46	21	SEA ABB=ON	PLU=ON	L45 NOT L41
L47	1375243	SEA ABB=ON	PLU=ON	GROWTH/BI
L48	54	SEA ABB=ON	PLU=ON	L47 AND L15
L49	129	SEA ABB=ON	PLU=ON	L15 AND PY<2003
L50	138	SEA ABB=ON	PLU=ON	L15 AND PRY<2003
L51	126	SEA ABB=ON	PLU=ON	L15 AND AY<2003
L52	166	SEA ABB=ON	PLU=ON	(L49 OR L50 OR L51)
L53	20	SEA ABB=ON	PLU=ON	L52 AND (L35 OR L36 OR L37 OR L38 OR L39)
L*** DEL	107	S L52 (L) L26		
L54	52	SEA ABB=ON	PLU=ON	L40 AND L52
L55	63	SEA ABB=ON	PLU=ON	L53 OR L54
L56	33	SEA ABB=ON	PLU=ON	L48 AND L52
L57	81	SEA ABB=ON	PLU=ON	(L55 OR L56)
L58	4163	SEA ABB=ON	PLU=ON	BONE GROWTH?/BI
L59	1630	SEA ABB=ON	PLU=ON	BODY GROWTH?/BI
L60	2	SEA ABB=ON	PLU=ON	(L58 OR L59) AND L52
		D SCA		
L61	218210	SEA ABB=ON	PLU=ON	BONE#/BI
L62	11	SEA ABB=ON	PLU=ON	L61 AND L52
L63	3	SEA ABB=ON	PLU=ON	L40 AND L62
L64	9	SEA ABB=ON	PLU=ON	L53 AND L40
L65	69	SEA ABB=ON	PLU=ON	L52 AND L19
L66	36	SEA ABB=ON	PLU=ON	L65 AND L54
L67	52	SEA ABB=ON	PLU=ON	L40 AND L52
L68	10	SEA ABB=ON	PLU=ON	L67 AND L47
L69	37	SEA ABB=ON	PLU=ON	L35 OR L41 OR L42 OR L60 OR L62 OR L63 OR
		L53 OR L64 OR L68		
L70	9	SEA ABB=ON	PLU=ON	L53 AND L40
L71	33	SEA ABB=ON	PLU=ON	L52 AND L47
L72	51	SEA ABB=ON	PLU=ON	L69 OR L71
L73	1138160	SEA ABB=ON	PLU=ON	GROWTH/AB
L74	13	SEA ABB=ON	PLU=ON	L73 AND L52
L75	44	SEA ABB=ON	PLU=ON	L69 OR L74
L76	0	SEA ABB=ON	PLU=ON	L15 (L) COS/RL
		E DALF/AU		
		E DAL F/AU		
L77	62	SEA ABB=ON	PLU=ON	DAL FARRA C?/AU
L78	59	SEA ABB=ON	PLU=ON	DOMLOGE N?/AU
L79	31	SEA ABB=ON	PLU=ON	BOTTO J?/AU
L80	57	SEA ABB=ON	PLU=ON	L77 AND (L78 OR L79)
L81	7	SEA ABB=ON	PLU=ON	L78 AND L79
L82	58	SEA ABB=ON	PLU=ON	(L80 OR L81)



L83           6 SEA ABB=ON   PLU=ON   L80 AND L81  
               D STAT QUE L69  
 L84           44 SEA ABB=ON   PLU=ON   L69 OR L70 OR L74  
 L85           0 SEA ABB=ON   PLU=ON   L84 AND (L77 OR L78 OR L79)  
 L86           3 SEA ABB=ON   PLU=ON   L5 AND (L77 OR L78 OR L79)  
               D SCA  
 L87           6 SEA ABB=ON   PLU=ON   L5 AND ((L16 OR L17 OR L18 OR L19) OR L30  
               OR L40 OR (L31 OR L32 OR L33 OR L34) OR L47 OR (L58 OR L59) OR  
               L61 OR L73)  
 L88           3 SEA ABB=ON   PLU=ON   L87 AND (L77 OR L78 OR L79)  
 L89           26504 SEA ABB=ON   PLU=ON   CUTANEOUS/BI  
 L90           0 SEA ABB=ON   PLU=ON   L52 AND L89  
 L91           1 SEA ABB=ON   PLU=ON   L15 AND L89  
               D SCA  
 L92           0 SEA ABB=ON   PLU=ON   L91 AND (L77 OR L78 OR L79)

FILE 'REGISTRY' ENTERED AT 12:01:44 ON 05 SEP 2007

FILE 'ZCAPLUS' ENTERED AT 12:01:49 ON 05 SEP 2007

              D STAT QUE L83  
               D STAT QUE L86  
               D STAT QUE L88  
 L93           0 SEA ABB=ON   PLU=ON   (L77 OR L78 OR L79) AND L15  
 L94           7 SEA ABB=ON   PLU=ON   L83 OR L86 OR L88  
               D IBIB ABS HITIND HITSTR L94 1-7

FILE 'REGISTRY' ENTERED AT 12:03:47 ON 05 SEP 2007

FILE 'ZCAPLUS' ENTERED AT 12:03:52 ON 05 SEP 2007

              D STAT QUE L25  
               D STAT QUE L27  
               D STAT QUE L5  
               D STAT QUE L87  
               D STAT QUE L35  
               D STAT QUE L41  
               D STAT QUE L42  
               D STAT QUE L60  
               D STAT QUE L62  
               D STAT QUE L63  
               D STAT QUE L53  
               D STAT QUE L64  
               D STAT QUE L68  
               D STAT QUE L70  
               D STAT QUE L74  
               D STAT QUE L91  
 L95           51 SEA ABB=ON   PLU=ON   (L25 OR L27 OR L5 OR L87 OR L35 OR L41 OR  
               L42 OR L60 OR L62 OR L63 OR L53 OR L64 OR L68 OR L70 OR L74 OR  
               L91) NOT L94  
               D IBIB ABS HITIND HITSTR L95 1-51

FILE HOME

FILE ZCAPLUS

Copyright of the articles to which records in this database refer is  
 held by the publishers listed in the PUBLISHER (PB) field (available  
 for records published or updated in Chemical Abstracts after December  
 26, 1996), unless otherwise indicated in the original publications.  
 The CA Lexicon is the copyrighted intellectual property of the

American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS is strictly prohibited.

FILE COVERS 1907 - 5 Sep 2007 VOL 147 ISS 11  
FILE LAST UPDATED: 4 Sep 2007 (20070904/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 SEP 2007 HIGHEST RN 946048-22-2  
DICTIONARY FILE UPDATES: 4 SEP 2007 HIGHEST RN 946048-22-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

#### FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Aug 31, 2007 (20070831/UP).

=>